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THE PRESIDENT'S ADDRESS.[1]

BY JOSEPH M. MATHEWS, M.D., LL.D.
OF LOUISVILLE, KY.,

Our National Body; Its Purposes and Destiny.—I imagine that when the father of this Association, the Nestor of American medicine, called around him a few devoted friends, accomplished physicians and surgeons, and effected an organization to be known as the American Medical Association, the first thought which filled their minds was the unification of the profession which they loved so dearly. It was their desire, no doubt, to bring together each year the men who were laboring earnestly and honestly for the elevation of the profession, that they in conclave could impart to each other the advance that each succeeding year had brought forth in their chosen calling, and this done in order that the sick and afflicted could be profited thereby.

Shall We Have a Local Habitation?—It is to be seriously questioned whether this Association, so numerically great as it is destined to be, or in truth is now, profits in any manner by its migration each year to distant parts of the Union. It cannot be well denied that a mistake has been made in the past in going to cities too small to entertain it. It certainly adds no dignity to this distinguished body to be thus traveling about, not to speak of the inconvenience occasioned to the majority of its members by so doing. Nor is it right or proper to impose upon a local profession the expense and trouble that it takes to entertain it. If the members will give the subject careful thought and consideration, I believe that they will come to the conclusion that the Association should have a local habitation. The natural question would then be, where could such habitation be found? In the selection of the same, many things would have to be considered. A city within easy reach which offered the most attractive advantages. Of all, the City of Washington is the best suited. The capital of the nation, it has the advantages that no other place can offer. With its great free libraries, it is the seat of learning; its magnificent Government buildings, its natural beauty, its select society, its two houses of Congress, the rendezvous of foreign representatives and diplomats, the home of the Medical Departments of the Government Army, Navy, and Marine Hospital Corps. Then, too, the idea is not far fetched that the Government, liberal always, would at some time lend the Association a helping hand in the way of securing a suitable building in which to hold its meetings and to become the owner thereof. Again it would be in touch with the legislative department of the Government, and it can readily be seen of what value this would be in securing much-needed reforms in a medical way. The *Journal* would here find the most suitable of all abodes; an atmosphere of refinement, education, and wealth. Its editor would all the time be on the alert, and much profit would come to the *Journal* from such surroundings and associations. I beg of you to give this matter your most serious consideration.

Clinics, Dinners, etc.—It has been a noticeable fact for a long time that the clinics which are held each year during the meeting of the Association, by the local profession of the city in which it happened to meet, very materially decrease the attendance at both the general sessions and of the various Sections. This should not be, and it is the duty of the proper officials of this Association to deprecate the holding of such clinics.

The Journal.—It is my painful duty to announce to you the death of Dr. John B. Hamilton, editor of the *Journal* of the Association. This Association never had a truer friend than he. Possessed of a clear-cut individuality, he was always outspoken, and what he did he at least believed to be for the best. We will miss his wise counsel in our deliberations. He made a most excellent editor of the *Journal*, and by his efforts it was brought up to the high standard which it occupies to-day. The Board of Trustees of the *Journal*, after careful consideration and deliberation, has selected Dr. George H. Simmons to succeed Dr. Hamilton as editor. You are to be congratulated upon this wise selection. Dr. Simmons is not an experiment, for he has won his laurels in medical journalism, and already stands among his editorial friends as the peer of any. Having come up from the ranks in journalism, he is ac-

[1] Abstract.

quainted with every detail, and that he will make a good editor goes without saying.

The Management of the Journal.—I trust that it will not be considered out of place if I make a suggestion or two in regard to the management of the *Journal*. It has been frequently urged that much appears in it that should be expurgated. In other words, that a censorship should be established, and many articles withheld from publication. I desire to disagree from this sentiment entirely and unequivocally. The *Journal* is simply the mouthpiece of the Association, and if one single paper read before this body is to be refused publication, then you have violated your pledge and obligation. Any member has the inalienable right to disagree with the sentiment of any paper, and the editor is in no wise responsible for said sentiment. If a paper is good enough to be read before any section in this Association, it is good enough to be published in the *Journal*. If any action is taken, it should be by the Chairman of the Section before which the paper is to be read, saying to the reader that his paper does not come up to the standard. But who will assume this responsibility? and who is to judge the judges? May it not be that a paper, although couched in bad English, might contain matter of real merit? By all means let the editor improve the *Journal* in any way that he deems proper, but let every paper read before this Association or its sections be published in the *Journal*.

There are many hundreds of worthy physicians in the United States who would readily join the mother society if properly approached. Many, very many of them are ignorant of the manner of becoming members. It may be urged that the salary necessary to secure an agent would be too large to justify the employment of such. In refutation I would urge that by such individual solicitation many more would be added to the membership than would be necessary to pay said salary, and they would become permanent members. It can be said, especially to young men, that the mere wearing of the button of the Association adds dignity and confidence.

The Secretaryship.—For several years there has been a heated debate, if not wrangle, at each annual meeting, in general session, over the secretaryship. This is both unseemly and undignified, and is to be much deplored. It seems to me that there is an easy solution to this matter. Let the editor of your *Journal* be the secretary of the Association. The Board of Trustees has wisely insisted that he devote his whole time to the *Journal*. It does, therefore, appear that the secretaryship should be one of his duties. By so acting he is brought into a closer relation with the business management of the Association, and with the active membership of the same. He would himself be responsible for a correct report of all proceedings, and be enabled to keep them without fault. The question whether or not any addition should be made to his salary for this additional work can be determined by the Board of Trustees. Our present secretary has served us long and well, and for his services in the past the Association should, and no doubt does, feel deeply obligated to him. I am sure that he would be the first one to acquiesce in any move that would enhance the business interests or the prosperity of the Association. I, therefore, very respectfully offer the suggestion.

The Public Health.—I shall content myself with employing the balance of my time in asking your consideration of a few things which are not only a menace to the public health, but also to the safety of society. Having served as a health officer for many years, my mind naturally turns into this channel, especially so when I see an opportunity to enlist the interest and cooperation of this large and influential body of physicians.

Tuberculosis.—It behooves this national body of American physicians to take some action, or at least to approve the movement to stamp out, as far as scientific effort can do so, that dread disease that kills one-seventh of the world's population—tuberculosis. A few days ago, May 24-27th, there was held a tuberculosis congress in Berlin, international in character. The Liverpool Medical Institution, one of the most important medical societies in England has recently appointed a committee of its members "to consider what further steps can be taken for the prevention of tuberculosis, and for the treatment of the disease in the human subject." This committee proposes to consider (1) the nature of pulmonary tuberculosis, its communicability and preventability; (2) the provision of sanatoria; (3) the more effectual methods of controlling spread of infection, and (4) the desirability of adopting some form of notification. The eradication of bovine tuberculosis received a powerful stimulus throughout the Empire when recently Her Majesty the Queen gave orders to have killed such of her herd of Jerseys as were shown by the tuberculin test to be infected.

At the recent meeting of the French Association for the Advancement of Science, the Section of Hygiene, at the suggestion of Professor Nicholas, passed a resolution pointing out that the convection of tuberculosis by inhalation is only one of the modes of infection, and that a larger part of the diffusion of the disease is played by contagion through the alimentary canal, as proved experimentally and clinically, urging the necessity of taking adequate measures to insure the sterilization and harmlessness

of articles of food. All Europe is wide awake to the importance of this subject.

From carefully prepared statistics it is found that of the deaths from all causes between the ages of fifteen and sixty years, one-third of the number are victims of tuberculosis, and that it kills four and one-half times as many people as do smallpox, scarlet fever, typhoid fever, and diphtheria combined. It is estimated that at any given time in Germany alone 1,300,000 persons are affected with tuberculosis, and Osler says that 1,200,000 in America have the disease at all times. One in every fifty persons has the disease. Over 13,000 die of tuberculosis in the State of New York every year. In every other American city the proportion of deaths is equally as great. So important has this subject become that at a recent convention held in England to consider the question, "How to Prevent the Spread of Consumption," the Crown was represented by His Royal Highness, the Prince of Wales, who presided over the meeting. Great encouragement was given the move by Royalty and all others. The medical profession all over the world is deeply interested in the subject, the aid of governments is solicited, and every effort is being made to suppress this formidable disease. Since the germ which causes it is known, and its habitat, the condition under which it thrives, and that the disease is contagious, it does appear but rational to assume that it not only can be prevented by precautionary measures, but that it can be cured by proper environment and treatment. It is equally true that, even in the best of homes, the treatment usually accorded the patient is *nil* in effect and accomplishes nothing. Something more than this must be done if we expect to materially decrease the death-rate. What is that something? Detweiler believes that over twenty-four cent. of cases of tuberculosis are curable; Meisen, twenty-seven per cent.; Braymer, twenty-one and one-half per cent. And this under ordinary climatic and hygienic treatment. A much higher percentage of recoveries could be recorded if a real systematic and scientific treatment could be afforded these patients. Such a course can be instituted only in well-ordered and equipped hospitals designed especially for such inmates. In regard to the extent of the disease, I can do no better than to use the words of Professor Hirsch. He says, "It is emphatically a disease of all times, all countries, and all races. No climate, no latitude, no occupation, no combination of favoring circumstances forms an infallible safeguard against the onset of tuberculosis, however such conditions may mitigate its ravages or retard its progress. Like typhoid fever, phthisis dogs the steps of man wherever he may be found, and claims its victims among every age, class, and race." In answer to the question, What is to be done to prevent its progress? I would suggest a remedy in using the words of a resolution adopted at the International Congress of Hygiene in Brussels, in 1897: "The hospitalization of tuberculosis is urgent and will not long be withheld." In several large cities in the United States an earnest effort has already been made to carry this thought into practical utilization, especially so in Chicago and New York. It can readily be seen, however, that but a comparatively few out of this great number of afflicted can be accommodated in this manner. A country or State that is ever on the alert to prevent the landing of a foreign foe, or a hostile army, surely should ever be ready to aid in the suppression of a foe to the human race ten times more destructive to human life than the invasion of the country by an army of great size armed with the most improved rifles. Let us, then, in the name of humanity, invoke aid from the Government of this very humane people, in order to help put down and thoroughly conquer this foe.

During the last session of the New York Legislature a report of the Senate Committee appointed to investigate the advisability of establishing a State hospital for the cure of consumptives was made. Many reasons for the same were presented in the report. Among other things, the report read: "Tuberculosis is one of the most fatal diseases that the human race has to combat at the present day; its yearly victims inflict a serious and unnecessary drain upon the resources of the State—unnecessary because it is now demonstrated beyond question that by the adoption of proper preventive measures a large proportion of those who suffer from this disease may be saved. This is proven not only by the revelations of science, but by the results which have been obtained in the practical application of the means to prevent the spread of the disease. A large proportion of the cases brought under treatment have been cured, and so many have so improved as to be restored to the producing class. It is also shown that the efforts of the boards of health of this and other States, as well as in other countries, have so far succeeded in reducing the percentage of deaths from tuberculosis by the measures adopted that there is good ground for assuming that with wise laws properly enforced this disease may be almost wholly obliterated." Is it too much, then, to suggest that this Association, representing the most advanced thought of the medical profession of America, take action in this important matter? I would most respectfully urge you to appoint a committee to prepare a careful report on this subject and present it to the next Congress sitting, beseeching that this

Government erect, prepare, or donate hospitals or reservations in and at which the poor or others shall receive treatment for the cure of consumption. Also that it be impressed upon State boards of health in the various States the advisability of the respective States erecting similar institutions. The blind, the deaf, the insane, the feeble-minded, and other classes are so provided for, why not these? They are not able to care for themselves, and they are a menace to the public health. It must be confessed that in so far as the prevention of the disease is concerned that must come from the education of the people to the facts. The best way to accomplish this I leave to you.

The Antivaccinationists.—It may appear superfluous to ask that you consider, in the proper way, a rebuke to a certain class that is doing much to endanger the lives of our citizens, and whose meddling ways are giving the health boards of the various States much annoyance. I allude to the antivaccinationists, encouraged as they are by an antivaccination society. It seems strange and beyond belief that citizens of respectability and supposed intelligence should band themselves together to prevent a means of saving human life. But "'tis true, and pity 'tis, 'tis true." If these misguided people would only inform themselves of facts, patent to every reader of history, they might at least stop long enough in their mad career to think.

We may rest in peace and disregard the efforts of these half mad people, but we must not close our eyes to the fact that, by their loud cry, aided by political influence, given often for self-aggrandizement, they are endangering lives in every community. So far has this thing gone, that the vaccination law in England has but recently been amended so that only those who may desire shall be vaccinated. This is a menace to the public health and smacks of the Dark Ages. I again respectfully ask that you give to the medical profession in America an endorsement of their views in a resolution sustaining *compulsory* vaccination. The safety of the people from this most direful malady demands it.

A Crusade against Syphilis.—An International Medical Conference will be held at Brussels, Belgium, in the month of September next, known as "The International Conference for the Prevention of Syphilis." A statement of this fact has been sent the Honorable Secretary of State of the United States, through the Belgian minister at Washington, with the request that he appoint a delegation to attend this important conference. The Honorable Secretary in turn requested me, as your presiding officer, to name said delegation. This I have already done, as the call was for immediate action. In the preamble which accompanies this notice the following language is used: "The increasing propagation of syphilis and venereal diseases has become a serious danger to society, and it is important while there is still time to take efficient measures to stop the progress of this scourge. The spread of the evil is an incontestable fact; on this point all physicians who are in a position to know or observe its progress are agreed. The number of victims increases daily, and a serious consideration is that this malady is penetrating into a strata of society where it was formerly rarely seen. Scarcely any attempt hitherto has been made to check this social evil, or rather while some attempts have been made, without concerted action, without preconceived plans, and without an international understanding to success."

What can be said of Belgium in this regard can be said of the United States. Perhaps the ratio of cases is not so large, but this matters little. It is estimated that there are in this country between six and seven million people who are afflicted in one way or another with syphilis. A distinguished French authority says that one man in every four has the disease in France. When we consider that by this the very foundation of society is shaken, our families imperiled, the constitutions of our youths undermined, our women wrecked, it is high time, as this official says, that we turn our attention to the subject. The warning should be in words that the most illiterate man or woman can understand, and it should emanate from sources and places that would reach the greatest number. Our false modesty has been too pronounced, and has prevented us from giving to the common people valuable information; so we are in a measure, as a a profession, to blame for the great spread of this blighting curse.

The time has arrived when we as physicians, singly or when in convention assembled, should throw aside all restraint when dealing with this vital question. Fathers, mothers, sisters, brothers, and all others should be informed, and this information should be in the plainest language. The minister and the priest should aid the doctor in this praiseworthy undertaking. The doctrine should be inculcated into the young of both sexes that freedom from this awful condition should exist before the marriage relation is thought of. Upon this declaration rests the hope of the State, as well as of families, for neither good soldiers, good citizens, nor good husbands with tainted blood can be had. Please permit me to suggest that a committee be appointed from this body to report at the next annual meeting on this subject: "What Is the Best Means of Preventing the Spread of Syphilis?"

A Plea for Harmony.—In conclusion, let me beg of you that this meeting be one of perfect harmony and peace. Let nothing of an acrimonious nature be indulged in, but rather let your deliberations be characterized by patience, love for each other, and a desire to ennoble the profession to which you belong. For are we not brothers indeed, fighting for a common cause—the obliteration of the common enemy, disease? May your future life, each and all of you, be one of peace and perfect happiness, and may God grant to all a long life filled with good deeds. If fate should decree that any one of you should pass away before we meet again may you find eternal rest in "God's next country."

A CENTURY OF MEDICINE IN AMERICA.[1]

BY J. C. WILSON, M.D.,
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THE most wonderful century of the world's history draws to a close. Not in all time has there been such a period. The diffusion of knowlege, man's power over nature, and organized human energy have yielded results that mark the latest as the most brilliant epoch of our civilization.

Has medicine, that branch of human endeavor in which we are especially interested, kept progress with the times? Has the century done for it what it has done for other things? The question is not hard to answer. For medicine the changes of this year-hundred have been the awakening from the sleep of ages. The work of the early anatomists, the great discovery of Harvey, Auenbrugger's laborious revelation, Jenner's patient investigation, were stirrings in the slumber.

The dawn of the century was auspicious. Vaccination was widely practised, and its value everywhere recognized. Corvisart rescued the Inventum Novum from oblivion. Laennec invented the stethoscope and discovered auscultation. The methods were practically complete, but it took forty years and the influence of Skoda to make physical diagnosis a familiar art. The era of speculative medicine was fast drawing to a close. Fads and isms arose, as they will arise from time to time among the half-educated and the degenerate, but their influence has been with few exceptions shortlived and its reaction upon scientific medicine favorable. The microscope ceased to be a scientific toy and became an instrument of precision. New sciences ranged themselves as the handmaids of medicine. In 1858 Virchow issued the "Cellular Pathology as Based upon Physiological and Pathological Histology." It was but a step onward to experimental physiology, physiologic chemistry and experimental therapeutics. In truth the "close and severe" methods had come, and had come to stay. It was evident that these methods, and these only could be successfully used in the search for truth. The fairy-tales of science had become the everyday handbook of the doctor. We had fully entered upon the era of experimental medicine. Ether and chloroform anesthesia for operative purposes robbed surgery of half its terrors and rendered possible operations previously impracticable. The germ theory of disease came into prominence as a working hypothesis. Lister made the astounding discovery of surgical cleanliness, and early in the last quarter of the century the New Surgery replaced the old.

The obvious impossibility of the individual mastery of the medical sciences and of the art of medicine gave rise to the specialties. In truth the laboratories were the beginning of specialism, which became an imperative need, partly on account of the necessity of more limited fields of investigation; partly because of the requirements of a precise and extended technical skill. If the specialties have been multiplied somewhat beyond the needs of the profession or the people, and if isolation of thought and shortcomings of practice have come of their too narrow cultivation, these are errors which tend to correct themselves, and, despite its faults, specialism is a power in the medicine of our times both in promoting knowledge and in direct healing, the importance of which cannot be overestimated.

Clinical medicine, great as has been its advancement, began to lag in the progress. It fell behind surgery and for a time kept abreast of the minor specialties. The explanation was not far to seek. It was to be found in the complexity of the problems and in the greater number of unknown values, especially in causation. For a time this great branch of medicine waited for that new science which was to place it foremost among the specialties, to render possible the study of origins, to reveal the nature of infection, to set preventive medicine upon a sure foundation, to point the way to rational systems of therapeutics. The germ theory of disease ceased to be a working hypothesis and became a demonstration. The science of bacteriology came into existence. Youngest of the biologic sciences, it has accomplished more for medicine in three decades than all the rest had been able to accomplish in three centuries. Bacteriology has done away with speculation in medicine forever, and has for all time established experimental research as the final court of appeal.

It is of interest to note the position of the United

[1] The Oration on Medicine delivered at the Fiftieth Meeting of the American Medical Association, held at Columbus, Ohio, June 6-9, 1899.

States in regard to modern medicine. It is no long time since our people were pushing westward over the wilderness and a famous poet and story-writer has accused us of being some centuries behind Europe in learning and manners. Railroads and the telegraph are great civilizers, and the Postal Union a wonderful teacher. There is no wilderness now except that beyond the seas and "a few centuries" is a figure of speech. In medicine the world's knowledge is ours. The latest work of investigators in every field of research and in every country is quickly before us and we give something in return. Laveran discovered for us the malarial parasite, and Marchiafava, Golgi, and others of the Italian school elaborated his observations; but an American, the late Professor J. K. Mitchell, had anticipated the discovery, being "the first to approach in a scientific spirit the nature of infective disease and particularly in malarial fever"; and Laveran's observations were early confirmed on this side of the Atlantic by Councilman, Osler, Thayer, and others. Roux and Behring gave to the world the treatment of diphtheria by antitoxin-serum, but the uncertainties concerning its efficacy were settled by Welsh's analysis of the statistics and the two collective investigations of the American Pediatric Society. Ernest Brand devised the method of treating enteric fever by systematic cold bathing and showed that by it the mortality is cut in half, but it remained for American practitioners to demonstrate that the plan is not only feasible in hospitals but also in private practice. Macewen and Horsley showed that cerebral tumors could not only be definitely localized, but also that they could be successfully removed, but cranial surgery was carried to its full development and a perfect technic laid down by Keen. Here and there we have given more than we have received. We recall the contributions to neurology and especially the successful treatment of neurasthenia and hysteria by Mitchell, the second in the line of an illustrious medical family, and speak of intubation in grateful memory of the gentle O'Dwyer, and in surgery we are reminded that the New World has given something to the Old by the work of Senn, Murphy, Richardson, McBurney, my colleague Deaver, and by that in earlier times of the clear-minded Grosses, father and son, the brothers Atlee, and the heroic McDowell. The instances of accord, response, coendeavor between the workers in medicine on the opposite shores of the Atlantic could be indefinitely multiplied.

It is clear then not only that medicine has kept pace with the progress of the times, nay more, that it has made advances even more wonderful than many other departments of thought, but also that in America the position of the profession compares favorably with that of any other country. Medicine with us is to-day one with the medicine of the world. Yet it is little more than 100 years since the country was without a medical profession in the sense in which the term is now used and was then used in the Old World.

It must be admitted that the rapid strides with which the medicine of the younger country has overtaken, and is now keeping pace with the medicine of the world, were largely due to the facilities of intercommunication that constitute one of the peculiarities of modern life. Knowledge travels far and fast. It has the wings of the light. It must be also conceded that such progress has been aided and accentuated in a remarkable manner by the master-spirits who, from time to time appearing upon the scene, seem to be charged with an especial mission, and whose presence marks eras in the course of human events. Easily, and by far the greatest of these, *primus inter pares*, is Rush. Others among his contemporaries I have already referred to. Nor do I intend to enumerate a complete list. Permit me to name one here and there, sometimes a group, as fine examples of medical men who, to say the least, are not commonplace. It is easy for one who has read our medical history to recall John Morgan, Redman, Hosack, Drake (who wrote the "Diseases of the Mississippi Valley"), that coterie of Louis' pupils, including Shattuck, Oliver Wendell Holmes, and Gerhard, who brought back from France physical diagnosis, the distinctions among the fevers, and reasonable methods of clinical work; Jackson and Morton, and the controversies concerning ether; the group of men who, representing others, it is true, really effected the organization of the American Medical Association, whose officers were Knight, Bell, Delafield, Arnold, Stillé, Jones, of New Orleans, is to be mentioned among those whose writings have powerfully influenced the trend of medical thought in the United States, and Flint, and Otis, and Woodward, to whose industry and ability we owe the "Medical and Surgical History of the War of the Rebellion;" and Billings and Fletcher, who have given to the medical world the "Index Catalogue of the Library of the Surgeon-General's Office of the United States Army," and that unique and most useful of current medical publications, the *Index Medicus*. I mention with that emotion with which we speak of a companion newly passed away, John B. Hamilton, of whose skill as an organizer this Association has had abundant proof; and Pepper, a life of matchless energy and devotion to the widest human interests, whose rare gifts as a physician, abilities as a teacher, civic pride, and high patriotism will place him, when the dispassionate

history of our times comes to be written, among the great Americans and in the foremost rank of the citizens of that commonwealth which reverently claims Franklin and Rush as her own.

The tendency which distinguishes American medicine is essentially opposed to isolation, to individualism. It exerts itself in the direction of a higher, more complete and more specialized organization of the profession. It is this tendency that has made the general fund of knowledge accessible to all members of the profession who care to share in it; that has given to the independent worker in whatever department an uplifting sense of companionship, of community of interest, of sympathy in a common cause. It is this that has brought into the life of the toiling practitioner in the monotony of his everyday duties and cares a saving consciousness of personal dignity and power.

MEDICAL ASPECTS OF CRIME.[1]

By DANIEL R. BROWER, M.D.,
OF CHICAGO.

THE limitation and treatment of crime is one of the great questions of the day. The closing hours of the Nineteenth Century are full of wonders; the progress in medicine, in literature, and in arts has been marvelous. Medicine and surgery have made rapid strides. The insane, the feeble-minded, the deaf, dumb and blind have received in these later years treatment that is scientific and successful. The care of the criminal is the one great question that baffles society, and difficulties have arisen from the fact that the medical aspects of crime have not been sufficiently considered. Criminology of to-day is much in the same condition that psychiatry was when Pinel and Tuke appeared and wrought their memorable reforms, substituting patience and scientific treatment for brutality and chains. This transformation in the care of the insane has been brought about by the medical profession, and it is our duty to-day with equal zeal and earnestness to consider this question of criminality, find out its etiology and provide means for its cure. The pioneers in criminal anthropology have established the fact that the habitual criminal is an abnormal man, the abnormality manifesting itself, first, physically, in the criminal physiognomy, in stigmata of degeneration, in anomalies of the muscular, sensory, respiratory, and circulatory systems; and, second, psychically, in moral insensibility, lack of forethought, low grade of intelligence, vanity and egoism, and emotional instability.

In approaching the study of this subject one is surprised by the rapid increase in crime beyond the ordinary increase in population. The census reports of our own country from 1850 up to and including 1890 represent the prisoners that were incarcerated, and it has been estimated that only about one-third of them are thus accounted for. The number of criminals in 1890 in the United States was about one-quarter of a million. The cost of their maintenance, arrest, and trial has been estimated at about $59,000,000. The statistics of the State of Pennsylvania confirm our national statistics. The same is more emphatically true in New York City. The population of that city has increased in the last ten years about 33⅓ per cent., while crime has increased more than 50 per cent.

The two great etiological factors in crime are criminal parentage and environment. The effects of these two agencies are strikingly illustrated in the history of the Jurke family, as related by Dugdale. Another of these remarkable exhibits is the tribe of Ben Ishmael, studied by McCullock. Professor Pellman, of Bonn University, has discovered and identified the descendants to the number of 709 of Frau Ada Jurke, a notorious drunkard, who was born in 1740, and died in 1810. Of these, 7 have been convicted of murder, 76 of other crimes, 144 were professional beggars, 61 lived on charity, and 181 were prostitutes. This family has cost the German Government for maintenance, cost of courts, almshouses, and prisons, one and a quarter millions of dollars.

An important factor in the cause of crime is intemperance. Fully fifty per cent. of the criminals arrested in Chicago are inebriates, and the police reports of New York show about the same proportion. Ferri has shown beyond question that in France crimes increase and decrease with the more or less abundant vintage, and we may safely attribute at least some of the increase of criminality and pauperism in the United States to the increase of intemperance, and it may be estimated that alcoholics are the direct or indirect cause of probably seventy-five per cent. of all crimes committed.

The constant and rapid increase of the urban population is another etiologic factor. The recent growth of cities is one of the phenomena of our social system. When our government was established a century ago, its first census showed only about 3.3 per cent. of the inhabitants of the country living in cities of 8000 and over. The census of 1890 shows such an increase that 27.6 per cent. of our population is urban.

The criminal laws and their unreasonable execution are another factor in the causation of crime. The code of to-day is largely the Roman code. In ancient Rome it did well because the death penalty

[1] Abstract of the Address on State Medicine delivered at the Fiftieth Meeting of the American Medical Association, held at Columbus, Ohio, June 6–9, 1899.

was common. The Coliseum had to be furnished with material for the amusement of the citizens, and "To the lions!" was a common sentence. And then Rome had her Tarpeian Rock from which the defectives could be hurled, and thus disposed of before the State could be troubled by their presence. To-day, with the death penalty rarely enforced, and with no such cutting off of the supply of criminal material, the law contributes to its increase rather than to its diminution. One of the absurdities of the law is the frequent conviction of the same criminal, which is not only expensive, but unprofitable. The case of Jane Cakebread of London, with her 269 convictions, is but an exaggeration of daily occurrences in our courts.

Our jails are schools of crime. The delay of the law gives children, sometimes arrested for trivial offenses, weeks or months of tutelage under old and often incorrigible masters in crime, even before their guilt or innocence is established, and after conviction further instruction in the same arts, so that when they leave, after a brief period of restraint, they are experts and will do much damage to person or property before they are again sent up for further instruction.

Then, again, laws are defective because they are directed against the crime and not the criminal, overlooking the important fact that the crime is an accident, and the criminal may be the product of a long line of etiological factors demanding for his cure, not punishment, but reformation. The habitual criminal, who constitutes the great bulk of the class, is a biological study, and his anatomic, physiologic, and psychologic nature demands most careful investigation in order that physicians may determine the ways and means to settle the various and vast questions to which he gives rise.

The brain weight of the criminal does not differ materially from that of the non-criminal. The potentiality of the brain does not depend so much upon its size and weight as upon its structure. The brain of Gambetta was very small but very elaborately convoluted, so that it doubtless contained more and better neurons than that of the average person, and one of the heaviest brains on record is that of a bricklayer who could neither read nor write. Flesch, out of fifty brains of criminals, did not find one without anomalies. From an examination of twenty-eight brains he found alterations in the meninges to the extent of fifty per cent. in the way of adhesions, various forms of meningitis, hemorrhage, atrophy, and atheroma; these observations have met with abundant confirmation. Benedikt, one of the most thorough and conscientious workers in this field of criminal pathology, found in an examination of nineteen brains of criminals, a confluence of fissures. Another anomaly noted by this observer is that the frontal lobe is sometimes divided into four convolutions instead of three, which he considers an evidence of reversion to the carnivorous type. He has found other anomalies in brain-structure in criminals. The feet of the criminal frequently show a tendency to revert to the flatfoot of the lower races, and this is usually associated with a low instep. The thyroid glands of the inmates of the Elmira and Pontiac reformatories have been examined by Talbot, who gives the author the following figures:

	Examined.	Normal.	Excessive.	Deficient.
Elmira.....	1045	106	909	36
Pontiac.....	465	145	183	137

Bono, in studying the eyesight of criminals, found sixty per cent. of 221 young criminals color-blind. Biliakow, who made similar observations on 100 murderers, found fifty per cent. of them color-blind. Tactile, temperature, and pain sense are rarely normal in criminals. They are usually much diminished, especially pain sense. Anomalies of patellar tendon reflex are common; they are either exaggerated or very frequently absent.

In fifty autopsies Flesch found twenty per cent. which showed affections of the heart so grave as to be the cause of death. On calculating accidental affections of the pericardium and endocardium the rate was fifty per cent. In this respect the criminal resembles the insane. Many of the manifestations of insanity are due to cardiac vascular disturbances, and this might reasonably be expected when it is remembered that the blood-supply of the brain is much more extensive than that of any other organ not concerned in blood-making or blood-purification.

On the psychical side of the criminal's character we find moral insensibility, a lack of forethought, a low grade of intelligence, vanity, egoism, and emotional instability.

The next important aspect of this question is the treatment, which should be based on etiology to be scientific, and as criminal parentage and environment are the two great causal factors, so the treatment should be directed against them. First, the propagation of crime should be stopped. It should be made impossible for there to be any more Jukes, Ben Ishmael, or Jurkes families, and to do this marriage should be regulated. There should be no possibility under the law for these people to marry and propagate their kind.

The operation proposed by Dr. Ochsner, which consists in a resection of the vas deferens, does not mutilate the person. It does not destroy his sexual power, but it does prevent propagation, and it is an

operation attended by very little risk to life. In the speaker's judgment it may be made a most useful agent in preventing an increase in criminals. Castration has been proposed by some, but the operation is vastly more dangerous. It is a great mutilation, destroys sexual power, and for these reasons is by no means as useful an operation as the one proposed by Ochsner.

The children of these degenerates should be taken in charge by the courts and placed at the very earliest possible age, certainly not later than seven years, in a favorable environment, and by this means the great bulk of them might be made useful citizens. Alcoholism is a very important and difficult etiological factor to control. The saloon is such a powerful factor in our political system that it seems to be impossible to have legislators enact laws that will regulate properly this great traffic. The way to accomplish positive results is for physicians to spread information among the people as to the baneful influence of intemperance, and so educate the old and the young as to the powerful influence of this great factor in politics, so that it may be neutralized. Legislation is needed for inebriates; authority to place them in prolonged confinement, during which they may undergo such treatment as may be necessary for their cure. Legislation is certainly needed to diminish the traffic in alcoholics, and to improve the quality of the liquor furnished. But the best way out of it is not by prohibition at this time surely, but it may be by a high-license system. There should be some remedy provided against the constant increase in urban population. Some method should be provided for the restoration of the equilibrium; some way by which the unproductive citizen may be transported to the country and made productive.

The last etiological factor, the laws and the unreasonable manner of their execution, demands such changes that those who are concerned in the sentencing of criminals should know something about their biological condition, and surely the ordinary juror cannot possibly possess this knowledge. All sentences should be indeterminate; the criminal should be sent to a prison or reformatory, not for any specific time, but until he is reformed or cured, precisely as a patient is sent to a hospital. A person who has committed his first offense should not be permitted to associate with hardened criminals. Trials should be speedy and prompt. The pardoning power should be taken out of the hands of governors of States, and placed under the control of a board of pardons, whose members shall be skilled in criminal anthropology. For criminal minor children there should be reform schools, where, through a protracted period, these children should be educated by manual training, and taught some useful occupation that may be to them the means of earning an honorable livelihood, and when the time comes for their discharge, they should be furnished with means by which they may establish themselves in the occupation for which they have been trained. This is not an untried proposition, but is to-day a practice in Russia. There should be reformatories for the older criminals who are capable of reformation, and these also should be taught not only the rudiments of an English education, but useful arts, and their confinement should last until they are able to withstand temptation and earn an honest living, and, when released from the care of the reformatory, they, too, should be provided with a reasonable capital with which to make a start in life. And, lastly, for those who are incapable of reformation, there should be penitentiaries for their lifelong incarceration, and these should be made as near self-sustaining as possible by having the prisoners employed in useful occupations.

SANITARY LESSONS OF THE WAR.[1]

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As compared with the Civil War and with other great wars during the present century the mortality from wounds and disease among our troops during the war with Spain has been low. Our wounded have, to a large extent, had the advantage of prompt treatment with antiseptic dressings and a very considerable proportion of those who were not killed outright have recovered without any mutilating operation or septic complication. The mortality from disease has also been comparatively low, but unfortunately during the first months of the war that scourge of new levies of troops, typhoid fever, prevailed in many of our camps and claimed numerous victims. It is well known to sanitarians and military surgeons that, as a general rule, more soldiers succumb to disease than are killed by the bullets of the enemy, and our recent war has not been an exception in this regard. The total number of deaths reported in our enlarged army, including regulars and volunteers, from May 1, 1898, to April 30, 1899, is 6406. Of these 5438 died of disease and 968 were killed in battle or died of wounds, injuries or accident. During the Civil War the number of deaths from disease was 186,216.[2] The number who were killed in battle or died of wounds was 93,969, or about one-

[1] Abstract of a paper read before the Section on State Medicine at the Fiftieth Meeting of the American Medical Association, Columbus, Ohio, June 6–9, 1899.

[2] In addition to this 24,184 deaths are recorded as from unknown causes, and probably most of these deaths were from disease.

half of the deaths from disease. The total deaths from disease in the Union armies from the commencement of the war to the 31st of December, 1862, was 34,327, and in the Confederate armies during the same period, 31,238.

The following table gives the monthly death-rates from disease in our armies from May 1, 1898, to April 30, 1899, and, for comparison, the rates for the same period during the first twelve months of the Civil War:

COMPARISON OF MONTHLY DEATH-RATES (PER 1000) FROM DISEASE.

	1861–1862.			1898–99.		
Months.	Mean Strength.	Number of Deaths.	Ratio per 1,000 of M. S.	Ratio per 1,000 of U. S.	Number of Deaths.	Mean Strength.
May	16,161	18	1.11	.26	42	163,726
June	66,950	55	.82	.44	90	202,526
July	71,125	106	1.49	1.72	451	262,613
August	112,359	242	2.15	5.21	1,400	268,507
September	165,126	365	2.21	5.89	1,541	261,824
October	256,884	725	2.82	3.17	809	255,000
November	301,848	1,145	3.79	1.51	365	242,000
December	343,184	1,471	4.29	.84	201	240,000
January	352,760	1,598	4.52	.85	180	211,000
February	327,734	1,346	4.11	.87	156	180,000
March	328,878	1,575	4.79	.90	123	136,000
April	410,416	1,881	4.58	.71	80	113,000
Annual	229,452	10,522	45.86	25.73	5,438	211,350

In comparing the death-rates from disease during the year of the Spanish-American War, May 1, 1898, to April 30, 1899, and the first year of the Civil War, May 1, 1861, to April 30, 1862, note should be taken in the first place that the mean strength in May, 1861, was only 16,161 as compared with 163,726 men in service in May, 1898. The mustering in of volunteer troops progressed more slowly in 1861 than during the recent war, so that it was not until September and October, 1861, that the mean strength assumed proportions equal to that of the months of the Spanish War. Although the number present in the camps of 1861–62 after October, 1861, was largely in excess of those aggregated during the past year, the average annual strength during both wars did not differ greatly. Nevertheless the deaths from disease in 1861–62 numbered 10,522, while in 1898–99 they amounted only to 5,438. The death-rate per thousand of strength mounted gradually month by month in 1861–62, and indeed it did not reach its acme until February, 1863, when the rate of 6.39 was reached. In 1898, on the other hand, the acme, 5.89, was reached suddenly in September, but owing to the sanitary measures adopted the fall during October and November was as rapid as had been the rise.

The same gradual rise is seen in the mortality statistics of typhoid fever during the Civil War. The highest death-rate, 2.81, was not reached until May, 1862, the thirteenth month of the aggregation of the troops, when 1092 men died of this disease, and the fall of the rates was as gradual as the rise. On the other hand, the rise in 1898 was sudden, the maximum rate, 3.57, being reached in September, when 933 men died of this disease; but the fall during the months of October and November was as notable as the rise. This sudden suppression of the disease cannot be attributed to an exhaustion of the susceptibility of the troops to attack from this fever, as they only suffered at the rate of 12.37 per thousand of strength during the twelve months, whereas the troops of the Civil War suffered at the rate of 19.71 per thousand. It can be attributed only to the active preventive measures that were instituted, and especially to moving the troops to fresh camp sites and to the greater care exercised in the disposal of excreta.

The average mortality from typhoid fever in our regular army since the Civil War has been: For the first decade (1868–1877) 95 per 100,000 of mean strength (.95 per 1000); for the second decade (1878–1887) 108 per 100,000; for the third decade (1888–1897) 55 per 100,000. This latter rate compares favorably with that of many of our principal cities. For example, it is exceeded by the typhoid death-rate in the City of Washington, which is 78.1 per 100,000 (average of 10 years, 1888–1897); by that of the City of Chicago, which is 64.4 per 100,000; by that of Pittsburgh, which is 88 per 100,000. These figures, however, do not show the entire mortality in the cities mentioned as a result of typhoid fever, for without doubt many of the deaths ascribed to "malarial fevers" were in fact due to typhoid infection. Thus in the City of Washington the deaths reported from typhoid and typho-malarial fever (average of 10 years) numbered 78.1 per 100,000 of the population, while 23.4 per 100,000 are recorded as due to malarial fever. In Baltimore the mortality, as recorded, from typhoid fever is 41.5 and from "typho-malarial and other malarial fevers" 18.3 per 100,000. In St. Louis the figures are: Typhoid fever 35.7, typho-malarial and other malarial fevers, 49 per 100,000; in New Orleans typhoid fever 26.1, typho-malarial and other malarial fevers, 107.2 per 100,000.

It will be seen that sanitary conditions at our military posts in time of peace, as judged by the typhoid death-rate, compare favorably with those in our large cities in various parts of the country. As a matter of fact great attention has been given to post sanitation for many years past, and through the persistent

efforts of officers of the Medical Department great improvements have been made, especially during the past ten years. The result is shown in a reduction of the typhoid mortality from 108 per 100,000 in the ten years ending in 1887 to 55 per 100,000 in the decade ending in 1897. Hygiene is made one of the principal subjects of examination for candidates desiring appointment in the Medical Corps of the Army, and at subsequent examinations for promotion to the grade of Captain and Major is given a most prominent place. It is also the most prominent subject in the course of instruction at the Army Medical School, where the student-officers spend five hours daily for a period of five months in practical laboratory work, relating for the most part to the cause and prevention of infectious diseases. It should be remembered, however, that the Army Medical School was not established until the year 1893, and consequently but a small proportion of the medical officers of the army have had the advantage of this course of instruction.

But the comparatively small number of medical officers of the regular army for duty in the large camps occupied by our volunteer troops at the outset of the war proved to be entirely inadequate to control the sanitary situation in these camps, and as a result of the conditions existing the mortality from typhoid fever in our armies during the year ending April 30, 1899, has been more than twenty-two times as great as it was in our regular army during the decade immediately preceding the war period. As compared with the first year of the Civil War, however, there is a decided improvement, the typhoid mortality for the first year of the Civil War having been 1971 per 100,000 of mean strength, and for the Spanish-American War 1237 per 100,000. Moreover, the vigorous sanitary measures enforced enabled our troops to quickly free themselves from the ravages of this infectious disease, and while the line of typhoid mortality continued to ascend during the first year of the Civil War and subsequently, it rapidly fell after the middle of September, last, and for the last six months of the period under consideration has been remarkably low. Indeed, in the history of large armies the record has never heretofore been equalled.

Typhoid fever in our camps has been to a large extent due to the neglect of well-known sanitary measures indicated by me in Circular No. 1, dated, Surgeon-General's Office, Washington, April 25, 1898; also to a very general failure upon the part of medical officers attached to regiments to recognize the disease in its milder forms and during its earlier stages. As a result of this the camps became infected, and the failure to use proper methods of disinfection, and the continued occupation of infected camps, has led to the development of veritable epidemics of typhoid fever in several of the camps occupied by our troops.

The principal lessons to be derived from our recent experience may be stated as follows:

A trained medical corps, hardly adequate for an army of 25,000 men, cannot control the sanitary situation when this army is quickly expanded to 250,000. Physicians and surgeons from civil life, however well qualified professionally, as a rule are not prepared to assume the responsibilities of medical officers charged with administrative duties and the sanitary supervision of camps. The proper performance of such duties cannot be expected from a physician without military training or experience, no matter how distinguished a position he may have held in civil life.

Courage and patriotism on the part of line officers and enlisted men cannot take the place of knowledge and experience. New levies of troops are, as a rule, ignorant of the first principles of camp sanitation, and reckless of the consequences of their neglect of prescribed sanitary regulations. Therefore, training and discipline are essential factors in the preservation of the health of soldiers in garrison or in the field.

The value of the aphorism "in time of peace prepare for war" has received additional support. This preparation should include a corps of trained medical officers larger than is absolutely necessary for the army on a peace basis, and systematic instruction in military medicine and hygiene for the medical officers of the National Guard, as well as for those of the regular army; also instruction of line officers in the elements of hygiene, and especially in camp sanitation. It should also include the establishment of camping-grounds in various parts of the country, having an ample supply of pure water, a proper system of sewers, etc. If our volunteers could have been assembled in such camps during the late war a saving in lives and money would have resulted which would without doubt have demonstrated the economy of such preparation for war in time of peace.

RESPIRATORY FAILURE OCCURRING BEFORE CIRCULATORY FAILURE IN BRAIN INJURY AND DISEASE, AND ITS CLINICAL BEARINGS.

BY W. H. HUDSON, M.D.,
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IN an article of mine, which has not yet been published, reporting a case of cerebellar cyst, which I located and successfully removed, I refer in a superficial way to the subject of this contribution. I

also discussed the subject more fully before the Alabama State Medical Association, at the meeting in Birmingham in 1898. I am impressed that the subject is of the highest importance and, from the little that is said and written about it, I think that perhaps many in the profession are not fully awake to the importance of this fact, either from the physiological bearing of the condition or its clinical significance. In 1890 I observed the continuance of circulation after breathing had ceased in a child which had a meningitis complicating pneumonia. In the early part of 1893 I observed the phenomenon which was present in a most striking manner in an infant a week old, whose cerebellum had been injured at birth; this infant was kept alive for twelve hours by artificial respiration.

The most striking instance of the importance of recognizing this condition that has come under my personal observation I will refer to later in giving a synopsis of the history of the case of cerebellar cyst. Before taking this up I will add here some of the most important cases which have appeared in the literature, and discuss briefly some of the most important contributions to this subject.

Leyden (*Virchow's Archivs*, Bd. xxxvii, 1866) was the first to record the changes in blood pressure by a series of experiments in which he raised the intracranial pressure by forcing air into the skull by a piston. He noted the slowing of the pulse, the deep stertorous respiration, the final arrest of respiration, and the final great rapidity of pulse. Hilton Fagge ("Principles and Practice of Medicine," pages 526 to 551, 1886) observes that some patients with cerebral tumor or abscess die from failure of respiration. In one case the respiration ceased thirty-five minutes before death; in another, a case of multiple cerebral abscess in the posterior and middle lobes, the breathing ceased ten minutes before death.

Professor Macewen of Glasgow, in his magnificent work, "Pyogenic Infective Diseases of the Brain and Spinal Cord," speaks of several cases of depression of the respiratory function with slowing of cardiac action. In his lectures delivered in San Francisco in 1896 he reported cases in which the pulse-rate was lowered to forty or even to twenty in the minute as the intracranial pressure increased. He also noted the occurrence of modified respiration resembling the Cheyne-Stokes type in cases of abscess of the cerebellar fossa, leading to death from pressure on the respiratory center, the pulse remaining quick and strong. In one case artificial respiration was carried on twenty-four hours, the pulse never flagging. Macewen has met with two cases in which the breathing was reestablished after hours of artificial respiration. In one case cited he opened and evacuated a cerebellar abscess while artificial respiration was being practised. In this case the relief of cerebellar pressure greatly relieved the general condition, and soon afterward the respiration became voluntary. This patient recovered temporarily but died later from cardiac failure, probably due to exhaustion, the restored breathing continuing perfect to the end of life. Macewen observed this phenomenon in a case of apoplexy, and also in a very interesting case in which the respiratory apparatus was destroyed by a crushing force, the heart continuing to beat, producing at each impulse a cracking of the broken ribs.

Mr. Victor Horsley, in a very valuable contribution to this subject, published in the *Quarterly Medical Journal*, July, 1894, calls attention to the fact that patients suffering from cerebral hemorrhages, tumors, depressed fractures of the skull, sudden and violent concussion, especially when applied in the occipital region, die from respiratory and not cardiac failure. Horsley, Spencer, and Leonard Hill confirm these observations. Horsley's clinical studies show that in cases of cerebral tumors, hemorrhages, and inflammatory foci death is apt to occur suddenly from arrest of the respiration. Indeed, respiratory arrest appears to be the common cause of death in all cases of pathological intracranial tension, especially when the disease is extremely chronic. He offers the suggestion that in cases in which patients fall apparently dead after sudden blows on the head, they do not die, as is commonly believed, from cardiac failure, but from the arrest of the respiratory function. In such cases he thinks that it might be possible to preserve life by artificial respiration. Direct experiments prove also that bullet-wounds of the cerebral hemispheres, severe injuries, etc., produce arrest of the breathing and when the respiratory center is not destroyed by the pressure of hemorrhage, or by direct injury, life may be preserved by carrying on the respiration artificially.

Sir Dyce Duckworth, in a notable paper read at the International Medical Congress, Moscow, August, 1897, calls attention to this phenomenon and thinks that the condition has not been fully recognized. In this paper he gives a record of four cases, which occurred under the care of Butlin, himself, Brunton, and Walsham. The salient points in these cases were diseases of the cerebellum, or posterior cerebral lobes, infective in nature with attending signs of increased intracranial tension. In three of his cases the temperature was normal or subnormal, in one instance rising from 96.8° to 102° F. in sixteen hours. It is possible that the inhibition of

the respiratory center may bear some relation to this absence of pyrexia, in a condition in which infection and inflammation play the important rôle. In each of these cases there was respiratory failure before heart failure, and though artificial respiration successfully prolonged life for a short time, in no case was death averted. It is the opinion of Duckworth that the respiratory center is the first to give way and is the most vulnerable of all the great nerve centers, being the first to resent undue intracranial pressure.

Without going further into the consideration of reports of these cases I give here a short history of a case which came under my care:

Julie R., a negro girl, seven years old, was placed under my care for treatment in the summer of 1896. The immediate family history was good; she was a well-nourished, healthy-looking girl, rather large for her age. Her head measured twenty-two inches in circumference, her eyes were prominent and protruding, with a lateral nystagmus; the movement of the eyeballs was restricted in all directions. The abducens of the right eye was more defective than the other ocular muscles. To close the eyelids required an effort, and they could be kept closed for a short time only. The pupils were widely dilated and did not react to light; there was double optic neuritis, with small retinal hemorrhages in one eye. She could barely discern light and only a short time later became totally blind. There was paresis of the right facial nerve. Hearing was good in both ears; taste and smell were normal; pulse was sixty-five beats to the minute; the respiration was lowered.

Her appetite remained good and at times was voracious; there was pain of moderate severity located in the back of the head and right side of the neck. The muscles of the neck were stiffened and the head was slightly retracted. There was severe pain when an attempt was made to straighten the neck. There was no pain on percussion, but firm pressure over the cerebellar fossa elicited pain. The grasp of the left hand was much weaker than that of the right. Both knee-jerks were absent. When lying down coordination in the arms and legs was good. In attempting to walk her gait was staggering and uncertain, and she would usually fall after walking a few feet. In walking there was a tendency to turn first to the left, later, as intracranial pressure increased, to the right. Percussion of the head indicated much ventricular distention. There was vertigo and vomiting, and also undoubted signs of paresis of the trunk. Toward the last, before the operation was performed, there was rapid failure of the mind, and a loss of sphincteric control.

From the foregoing symptoms a diagnosis of cerebellar disease was made, which was located with reasonable certainty in the right cerebellar lobe. I advised an operation, expecting to find a tumor, perhaps of tuberculous nature, as the child had been living in the house with persons affected with pulmonary tuberculosis. Her condition, however, did not suggest tubercular disease and I considered a sarcoma quite as probable.

I operated in June, 1896. It was evident that the intracranial pressure was very much increased and I apprehended the danger that might result therefrom during the operation, so I requested one of my assistants to hold himself in readiness to perform artificial respiration on the first indication of respiratory failure. I furthermore notified him that I would finish operating under artificial respiration if it should be necessary. With the most approved surgical precautions the skull was opened. The bone was not thicker than ordinary blotting-paper. The dura mater bulged into the opening through the bone, was very tense, showing the most marked intracranial pressure. When the dura was incised the brain was forced through the incision, and it at once became apparent that the excision of the protruding mass of brain would be necessary before a satisfactory examination could be made. After the first portion of the brain was cut away, more brain was forced out, which was also excised. On account of the pressure, perhaps, the brain presented an abnormal appearance, which I mistook for a tuberculous foci, and on this account stopped the operation without exploring the brain in any direction. (A month later, a second operation was performed, a large cyst opened and evacuated, with recovery almost complete, with the exception of blindness, which has remained stationary to the present time, May, 1899.)

The incision of the dura mater was closed by sutures as was the scalp wound. There had been very little bleeding during the operation and it was thought that the patient had stood it remarkably well. Just as the bandaging of the head was being finished respiration ceased, though the pulse remained good. I at once proceeded to practise artificial respiration, which had to be carried on fully thirty minutes, as estimated by the assistants present. At the end of this time there was a weak effort at breathing, which gradually grew stronger and in a few moments was established normally. The pulse at no time showed any sign of failure, when respiration failed, during the practise of artificial respiration, or during the establishment of normal respiration. I can but be certain that the life of this patient was preserved by the knowledge of the fact that this phenomenon may be looked for as a condition attending such a process existing in the brain, and that it is possible by artificial respiration to carry on this function until the breathing-center reasserts itself.

The sole purpose of this paper is to call the atten-

tion of physicians and surgeons to the fact herein brought forth; and as a summary of the study I would suggest: That in cases of intracranial pressure death is generally produced by failure of respiration and not of circulation; that in many cases of severe injury to the brain, such as gunshot wounds, blows, etc., the respiratory center may be inhibited and we may be able to save life by keeping up artificial respiration until hemorrhage may be stopped and the wound otherwise attended to; that the pouring of hot sterile salt solution on the exposed brain and on the patient's head, as suggested by Horsley, adds somewhat to the reestablishment of the arrested brain functions; that in operations upon the brain, especially those involving the posterior cerebral lobes and cerebellum, whether or not there are signs of increased intracranial pressure, we should be ready to practise artificial respiration even to the extent of carrying it on through the entire operative procedure.

As artificial respiration is a positive necessity, in the safe management of the cases here suggested, I would consider it of especial importance that we be able to perform it in the most effectual manner, and, therefore, the Fell-O'Dwyer apparatus should be at hand with an expert to use it, as the most effectual method we have at present, for the practise of artificial respiration, bearing in mind that it may be necessary to use external force to expel the air from the lungs.

THE RESISTANCE OF BACTERIA TO COLD.[1]

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IT is the object of this communication to put on record the results of some experiments made with liquid air in March and April, 1898, to determine what effect such intense cold would have on bacteria. The recent use of liquefied air in surgery, and the claim that it is a germicide give the subject a direct practical interest, and have led me to make this report in a much more incomplete state than I had expected and hoped. The difficulty in obtaining the air for experimental purposes is my only reason for not having carried my experiments further and it is my purpose to do so when possible. I am greatly indebted to Professor George F. Barker of the University of Pennsylvania for the interest shown by him in the subject, and for his kindness in supplying me with the liquid air used.

The temperature of liquid air is 312° F. below zero, and when one sees the effect it has on inanimate objects, and the rapidity with which it destroys tissues, one finds it hard to believe that vegetable life can withstand it even for a few moments, yet such is the case. My experiments were tried with anthrax spores dried on silk threads, with recently grown cultures of diphtheria on blood-serum, and with agar cultures of the typhoid-fever bacillus, and the bacillus prodigiosus. In the case of the three latter organisms a suspension of the growth was made in sterile water, silk threads impregnated with this suspension, and the threads then immersed in the liquid air without drying. At intervals a thread was removed, transferred to bouillon, and placed in the incubator. In this way anthrax spores were exposed to the action of the liquid air for one, five, ten, fifteen, and thirty minutes, and three hours; the diphtheria bacillus for fifteen and thirty minutes; the typhoid bacillus for twenty, forty, and sixty minutes; the prodigiosus for thirty and sixty minutes. In no case were the bacteria killed, nor could any inhibition even be detected, all cultures growing as rapidly and as vigorously as the controls.

When these experiments were tried it was my belief that bacteria had never before been subjected to such low temperatures, but in this I proved mistaken. I have, however, been able to find but one other such experiment recorded, by Pictet of Geneva, who subjected a number of bacteria, the names of which are not given, to the action of liquid air. He states that they afterward developed in the same way as controls kept at ordinary temperature. He could not detect any appreciable difference between the two. He does not give the length of time the cold was allowed to act. Previous to this Pictet and Yung had subjected various cultures to low temperatures. After an exposure to cold of 70° C. below zero, continued for 108 hours, and 130° C. below zero for twenty hours, they found that anthrax spores retained life and virulence intact, but virulent anthrax blood became innocuous. The bacillus of symptomatic anthrax retained its virulence also under the same treatment. Bovine vaccine lymph was rendered sterile. Brewer's yeast was not killed, but lost to a great extent its power of producing fermentation. Similar results were obtained by Frankland and Templeman, who found that anthax spores were practically unaffected by repeated freezings, the process having been repeated twenty-nine times, and the temperature being reduced on each occasion to 20° C. below zero, while the ice formed was not melted until twenty-four hours had passed. On the other hand sporeless anthrax was almost entirely destroyed by one freezing, and completely destroyed by two freezings. In the first experiment the freezings and

[1] From the Laboratory of the State Live Stock Sanitary Board. Read before the Philadelphia Pathological Society, May 11, 1899.

thawings extended over a period of three months, while in the latter only five days were occupied.

That what may be considered moderate degrees of cold can not be relied on for the destruction of infection has been painfully demonstrated by the epidemic of typhoid fever at Plymouth, Pa., in 1885, when the stools remained frozen for some time; and by the outbreak of yellow fever on the United States Corvette "Plymouth" in 1879, after having been frozen out at Boston, the ship piled up with ice, and the temperature falling to 28° F.

The former of these experiences prepares us for the statement of Prudden concerning the resistance of the bacillus of typhoid fever to cold. Prudden kept this organism in artificial ice at a temperature of 14° to 30° F. for 103 days, without entirely destroying its vitality. At the end of eleven days one million germs per c.c. were found; after seventy-seven days seventy-two thousand, and at the end of 103 days seven thousand per c.c. still remained. This bacillus has unusual powers of resistance to cold, and it is said by Seitz that multiplication begins to take place at 4° C. Certain water bacteria are said to be able to vegetate as low as zero centigrade, but among pathogenic organisms, the bacillus of typhoid fever is unique in its power to grow at low temperatures. Alternate freezing and thawing is rapidly fatal to the typhoid bacillus, according to Prudden. Beginning with 40,000 per c.c. he reduced the number to ninety in twenty-four hours, three thawings having intervened, and in three days the bacteria were entirely destroyed.

As would be expected, the power of resistance to cold varies with the species, and also in the same species to some extent. Prudden found that the staphylococcus aureus from an old and half-dried culture was destroyed after seven days of freezing, while that taken from a fresh agar culture, and present in uncountable numbers at the beginning of the experiment, still showed 50,000 per c.c. after sixty-six days of freezing.

Of twelve species of bacteria kept in a freezing mixture in gelatin culture by Heyroth for seven days, only three failed to grow; and of eighteen species kept for ten days only one failed to grow, the temperature being presumably about 20 ° C. below zero. These four were the organisms of swine fever, swine plague, rabbit septicemia and sporeless anthrax.

In conclusion I think it may be safely said that, so far at least as our present knowledge of it permits of its application, cold cannot be relied on as a disinfectant. In spite of the extravagant claims made for liquid air as a germicide, it is practically innocuous in this respect.

MEDICAL PROGRESS.

Paget's Disease of Thirteen-Years' Duration.—MASLAND and BABCOCK (*Proceed. of the Path. Soc. of Phila.*, April 1, 1899) showed a specimen of Paget's disease of the nipple taken from a white woman aged fifty-six years, who had been married but had never borne children. The interesting point about the trouble was that it had existed for thirteen years, and had not developed into carcinoma, although the nipple had been obliterated, and the greater part of the surface of the breast had been involved, being denuded of its superficial epithelium, and covered with a sero-purulent discharge. Microscopical examination showed that the mammary ducts were entirely obliterated, and to this fact the authors attributed the freedom from extension inward of the epithelial cells, as usually happens in Paget's disease after about two years. Aside from speculation as to its true nature, the chief interest in Paget's disease lies in its relation to carcinoma of the breast. It is not, however, a very frequent forerunner of this trouble, as investigation showed its occurrence only five times in 400 cases of mammary carcinoma.

Chloroform Water as a Preventive of Accidents after Chloroform Anesthesia.—WEBER (*Bull. Gen. de Therap.*, April, 1899) says that the nausea after chloroformization may be avoided if the patient will take chloroform water for several weeks before undergoing operation, so as to accustom the system to it. His attention was called to this fact by the absence of nausea after operation in the case of two patients, who on account of digestive disturbances had taken chloroform water after each meal for several weeks. As the taste and smell of chloroform is repugnant to some persons, the following mixture is recommended:

℞	Aq. chloroform.		℥ vj
	Spir. menth. pip. } aa		*m.* iv.
	Spir. anis. }		

Filter after twelve hours.

Successful Nerve Transplantation.—PETERSON (*Amer. Jour. Med. Sci.*, April, 1899) reports a case in which a secondary resection of a little more than an inch of both the median and ulnar nerves was made and the gaps closed in with portions of the sciatic nerves of a young hound. The result was exceptionally good, as both sensation and motion returned to a large degree. The author also gives a resumé of all the published notes of similar cases. He was able to collect twenty of these, nineteen of the operations having been performed upon the median, ulnar or musculo-spiral, one upon the sciatic. The implanted nerves were in six cases obtained from recently amputated human limbs, in the others from the sciatics of dogs, rabbits, or kittens. In twelve of the twenty cases there was improvement in sensation or motion, or both. In no case was there a perfect restoration of muscular power in every muscle affected. The return of sensation was complete in four cases, and nearly complete in three others, but collateral sensation has to be considered as possibly explaining a part of the return

of normal feeling. Vicarious motions of other muscles must also be watched, as this may be the true explanation of a very early supposed restoration of the nerve action. On the whole, however, the author considers nerve transplantation as a legitimate surgical procedure.

Prevention of Urinary Infection.—DOWD (*Buffalo Med. Jour.*, May, 1899) insists upon the importance of asepsis in the urethra before the passage of instruments into the bladder. No matter how carefully the external parts have been cleansed and the instruments boiled, they will be covered with germs before they have gone an inch from the meatus, unless the urethra has been disinfected. Of the numerous syringes which have been devised for this purpose, Dowd prefers a six-ounce syringe with a long nozzle, and a cup-shaped shield with the concavity looking outward. There can be no soiling of the clothes or hands with this instrument, and the surgeon can readily estimate the resistance of the urethra and the capacity of the bladder. He prefers a solution of formaldehyd as a disinfectant. After the instrument has been used, the bladder is filled with an astringent antiseptic solution, which the patient is allowed to pass immediately afterward. The irritation of instrumentation will thus be avoided. By these simple measures infection will be almost certainly avoided.

Synovectomy or Resection in Tuberculosis of the Knee.—BEGOUIN (*Gaz. heb. de Med. et de Chir.*, April 2, 1899) had an excellent opportunity to compare the relative advantages of synovectomy and resection in tuberculosis of the knee of adults, when limited to the synovial membrane. Two patients, aged twenty and twenty-six years respectively, entered the hospital at about the same time. The man, aged twenty-six years, was treated by resection, and in three weeks his leg was solid in a good position, and he walked without fatigue. The young woman was treated by synovectomy, and obtained a joint which could be moved a little for a time after the operation, but which became constantly stiffer and a little more flexed, so that at the end of three months she could not walk far without fatigue, and the process of flexion of the leg on the thigh was still going on. Whatever may be the desirability of synovectomy in the upper extremity, in the knee-joint an absolute immobility is far better than a rough, painful joint. A slight shortening of the limb which follows resection, is after all no disadvantage, as when the knee is ankylosed, it is a convenience to have the limb 1 inch or 1½ inches shorter than the other, to secure its easy manipulation.

The Thermal Death-Point of Tubercle Bacilli. — SMITH (*Jour. of Experiment. Med.*, March, 1899) found in his experiments that tubercle bacilli suspended in distilled water, were killed by exposure to 60° C. (140° F.) for fifteen or twenty minutes. The larger number were killed by an exposure of five to ten minutes. Suspended in milk, some of them were able to resist this temperature for more than an hour. The explanation of this apparently contradictory statement is given by Smith, who found that many bacilli were caught in the pellicle which forms on the surface of scalding milk, and that they escaped the general temperature of the liquid in this manner. He suggests that this may be avoided, either by submerging entirely the bottles containing the milk, or by filling them completely. Otherwise it will be necessary to continue to use the higher temperature of 68° C. (154° F.) which is now generally employed.

THERAPEUTIC NOTES.

Simple Treatment of Ingrowing Nail.—KINSMAN (*Columbus Med. Jour.*, April 4, 1899) says that he does not remember an instance in which, by the following method, he has failed to cure an ingrowing nail: (1) Remove all pressure from the nail by cutting away a piece of the shoe. (2) Disinfect with hydrogen dioxid until no more "foam" appears. (3) Apply a drop of strong solution of cocain in the base of the ulcer. (4) Apply a drop of Monsell's solution to the ulcer, then cover loosely with gauze. Repeat this process every second day until the edge of the nail is released, by the retraction of the hypertrophied tissue. The patient suffers no pain from the application, and all pain has disappeared by the second day. The cure is effected in a week or two without inconveniencing or interfering with business.

Aseptic Vaccination. — POEPPELMANN (*Deut. med. Wochenschr.*, March 9, 1899) insists upon five requisites for a perfect vaccination. (1) An animal lymph which is free from bacteria; (2) instruments made sterile by boiling; (3) the sterilization of the skin, preferably by a brisk rub with alcohol. This rapidly evaporates and so does not interfere with the success of the vaccination. In fact, the removal of the surface epithelium and the hyperemia induced by the rubbing favors the "taking" of the lymph; (4) the prevention of post-vaccinal infection, which is best accomplished by covering the wound with a celluloid capsule made for the purpose; (5) rapidity of execution.

Irrigation of the Bowel in Fermental Diarrhea.—HUBBARD (*Arch. of Pediatrics*, April, 1899) says that the worst cases of fermental diarrhea present clinically the picture of a severe toxemia. The ideal treatment would be to flush out the alimentary canal from the mouth to the anus. When seen the offending matters have usually passed from the stomach, so that it is the large intestine only which is accessible to irrigation. A large soft rubber catheter and a fountain-syringe are all that is needed, and water or saline solution, or some mild antiseptic, such as a weak solution of sulphonaphthol may be used for irrigation. The temperature of the fluid should be about 85° to 90° F., and the syringe should be held three feet above the body. The irrigation not only lowers the temperature, but quiets the restless babies, some of them even going to sleep during the process. The pulse is improved. No contraindications are mentioned as no bad results were seen to follow the irrigations in any instance.

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SATURDAY, JUNE 10, 1899.

THE COLUMBUS MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

IN the midst of record-breaking temperature there has been held, during the week, a most enthusiastic meeting of the American Medical Association in Ohio's fair capital city.

Nearly 3000 members registered, and the attendance from even distant parts of the country shows that the Association is growing in popularity and becoming more and more, with each succeeding year, what it should be—the actual representative body of the American medical profession. The reception accorded various portions of the president's address well shows the temper of the profession in this country with regard to certain practical questions, which, with most judicious discernment, he suggested for action on the part of the Association.

There was but one opinion regarding the adoption of measures to prevent the spread of syphilis in the United States. A hearty reception was given the proposal that State and Federal aid should be invoked in the active warfare it is expected henceforth to wage against tuberculosis, and the suggestion looking toward the erection of sanatoria for the treatment of the disease was heartily commended.

The proposal to have a single meeting-place for the Association, Washington to be designated as the most desirable situation, was received with applause at the meeting, yet the tone of private conversation afterward, among the members, showed that the suggestion meets with little favor. The proposal to make obligatory the printing in the *Journal* of the Association of all papers read at the annual meeting did not seem to have the sympathy of the audience.

In the Session on Surgery it was very noticeable that even the most conservative of surgeons no longer urges that there is any adequate medical treatment for appendicitis. The division of opinion now appears to be whether operation is indicated when symptoms of general peritonitis are present. The older men seemed to think that in this lies the patient's only hope, and that operation should be performed even in the face of almost certain failure. The younger men, on the other hand, considered general peritonitis a contraindication to operation and some advised, as the result of some successes, medical treatment with rectal feeding. In gall-stone surgery it was evident that immediate operation as soon as the diagnosis is assured is what the near future holds. It will no longer be counselled to wait in hope that Nature will dispose of the offending concrement, but just as in appendicitis true conservatism will dictate its removal and positive avoidance of the dangers connected with the let-alone treatment.

The discussion in the Section on Medicine of cerebrospinal meningitis proved most interesting. It is clear that Professor Osler did well in selecting "Cerebrospinal Meningitis in America" as the text for the Cavendish lecture, to be delivered next week in London. Physicians in this country have had a most varied and instructive experience with the disease. It has occurred seemingly sporadically among us under the most varied circumstances, and the results of scientific clinical observation from various parts of the country show that we have in America a great deal to add to the subject in the ordinary text-book.

THE EFFECT OF ALTITUDE ON THE BLOOD.

THIS very interesting subject, the effect of lowered barometric pressure on the blood, has been attract-

ing attention during the past ten years. The discussion at the recent meeting of the American Climatological Association of Dr. Solly's paper on the subject shows that there is still much about it that is doubtful and deserving of further investigation. Blood counts made within twenty-four hours after an ascent to a height of even 2000 feet show seemingly an increase in the number of red blood-corpuscles present. This disappears upon the individual descending to the ordinary level. Animals kept in bell-jars from which the air has been exhausted to a certain degree, exhibit the same phenomenon. The amount of hemoglobin is not at first increased proportionately to the number of red cells but there is a gradual rise in its value, and also an increase in the specific gravity of the blood.

The subject deserves further investigation especially from the clinical side and this seems to be a proper time of the year to suggest it as large numbers of people go during the summer months to the mountains. A careful comparison of the state of their blood as made by their family physician at home and their physician at the summer resort would furnish important scientific data. Examinations of their blood made after their return and compared with its condition before their departure would be especially valuable. It is the subsequent condition as revealed at the expiration of several months that has not been studied as much as other aspects of the question. It is, too, the most practical side of the problem, because it will reveal how lasting any effect of altitude on the hematopoietic system may prove to be.

Meantime it is well to bear in mind certain objections that carry a good deal of weight against admitting that the increase of red blood-cells is real, *i.e.*, that there is an actual addition of a large number of red corpuscles to those already existing in the body. In severe anemia, especially in pernicious anemia, when, because of the destruction of red cells, there is a constant call for the manufacture of them in greater numbers there develops over such important parts of the hematopoietic system as the flat bones, a tenderness to pressure that is the index of the increased function of the red marrow. The spleen is also enlarged and there is tenderness in the splenic region. Such symptoms have not been noted after ascent to an altitude though that ascent is seemingly followed in twenty-four to forty-eight hours by an increase of one half to one million or even by more red cells in every cubic millimeter of the blood.

Moreover, after the descent to the lower level the blood count descends as rapidly as it had previously increased. Despite the fact, however, that millions and millions of red blood-cells are seemingly destroyed, there are no manifestations of that fact and no appearance of the pigment of these cells in any part of the system. There is no icterus and no hemoglobinuria. Where the destroyed cells go to remains a mystery. To say as some observers have said that there are more shadow corpuscles in the blood after descent, does not mean much so long as the hemoglobin remains unaccounted for. Neither does the claim that there are a few more nucleated red blood-cells and mitotic figures to be found in the blood during the supposed rapid multiplication of red cells just after the ascent carry much weight.

It will be seen then that there is in this effect of altitude on the blood a most interesting question on which the clinician may throw a good deal of light. Is the effect only a redistribution of the red cells of the body in such a way that while they were previously crowded into internal organs they are now allowed in the rarefied atmosphere of mountains to reach the periphery? If this be the fact what effect has it on the general well being and on metabolism and above all, how long after descent do these effects continue?

ANTENATAL THERAPEUTICS.

THE subject of treating the fetus in utero for various conditions from which it may be supposed to be suffering has recently awakened renewed interest. Fournier has shown that it is possible to treat satisfactorily, through the mother, the child of a syphilitic father, even though the mother herself shows no signs of specific disease. In the *British Medical Journal*, April 15th, Dr. J. W. Ballantyne of Edinburgh publishes the concluding lecture of a series of six on the subject of antenatal therapy, which also gives some very pronounced opinions on this rather fateful question.

At times claims have been made that almost every drug in the Pharmacopœia will pass through the placenta and affect the fetus, while at others the whole subject has been thrown into its pristine confusion by the announcement, supposedly on experi-

mental grounds, that scarcely any drug will pass directly to the fetus. Dr. Ballantyne practically adopts this latter conclusion, which is also that of the French school, and considers that the fetus is affected only indirectly, the nutritional function of the placenta being influenced by medication sufficiently to produce its modifying effect upon the fetus. Of the drugs that he has found especially valuable in this way, the chief are the antisyphilitic remedies, mercury and the iodids, potassium chlorate, and alcohol. The antisyphilitic remedies he considers of the greatest service. Potassium chlorate he regards, as did Sir James Simpson and does Lawson Tait, as a useful drug in cases where premature labor or abortion has become habitual or is for any reason feared. Alcohol in any excess on the part of either parent always robs the fetus of its power of resistance to disease and makes it morbid during life.

He closes his lecture with a warning with regard to the use of quinin in the pregnant woman, even for malaria, because of its liability to produce abortion. He also refers t the supposed fact that female workers in tobacco factories frequently abort. These are two fetiches that have crept into obstetrical literature and continue to have libations poured out before them by each new writer in this specialty. We do not know that there are any statistics in medical literature that justify the assertion that workers in tobacco abort easier than other women. In tropical countries where malaria abounds and quinin is freely used the idea of quinin ever initiating labor pains is ruthlessly scouted though it is considered by many, because of its tonic effect, to strengthen pains already occurring.

ECHOES AND NEWS

Tuberculosis Tests in Chicago.—In Chicago, on May 29th, twenty-five dairy-cows out of a herd of sixty-one were found, by means of the tuberculin-tests to have tuberculosis. These twenty-five cows were slaughtered and the tests confirmed.

Physicians' Certificates.—Some of the New York City justices have announced that they will no longer accept physicians' certificates of sickness for unwilling jurors, but that in such cases the physicians will be called into court to testify concerning such illness.

State Private Charities.—The forthcoming number of *Charities*, the official organ of the Charity Organization Society of New York City, gives a full statement of the private charities of New York State that receive public aid. The total of the public appropriation for this purpose in 1899 is $3,251,802.84.

New Dispensary in Brooklyn.—The new building of the Bushwick and East Brooklyn Dispensary, erected at the corner of Lewis and Myrtle avenues, Brooklyn, by Henry Batterman, in memory of his daughter, Laura Frances Batterman, will shortly be opened. The structure has cost $20,000 and Mr. Batterman has donated $25,000 for the work.

New York Quakers on Vivisection.—The Friends of New York have replied thus to a communication from the Friends' Antivivisection Association of London: "We feel that while vivisection may be justifiable as a means of gaining knowledge for alleviation of disease, we believe the practice for the purpose of testing or illustration of what is already known to science should be discouraged and restricted."

Mountain Toothache.—A peculiar affection of the teeth, mountain toothache, has recently been observed by an Italian dentist. The sufferers are engineers and laborers, new hands, working at an elevation of 2600 yards or over, and consists of intense pain in several adjoining teeth. This lasts for from four to five days, until the new men become somewhat accustomed to the altitude. The teeth in every case were apparently healthy.

New Officers of the American Orthopedic Association.—At the executive session, held June 2d at the New York Academy of Medicine, the following were elected as officers of the Association for the ensuing year: President, H. M. Sherman of San Francisco; first vice-president, R. Tunstall Taylor of Baltimore; second vice-president, A. R. Shands of Washington, D. C.; treasurer, E. G. Brackett of Boston; secretary, John Ridlon of Chicago.

Smallpox in the United States.—During the week ending June 3, 1899, 140 cases of smallpox, with 10 deaths, were reported to the Surgeon-General of the United States Marine Hospital Service, as having occurred throughout the country since May 15th. According to this report Louisville, Ky., leads the list with 75 cases, with 4 deaths, while Swampscott, Mass., reports 20 cases, with 1 death; Philadelphia, 29 cases, with no deaths, and St. Louis, 16 cases, with no deaths.

Christian Science in Chicago.—On June 1st it was reported from Chicago that within a few days two patients ill with diphtheria had been treated by Christian Scientists and had died. Each was four years of age. It is stated that the Health Department of Chicago has decided to take steps to compel those having charge of contagious diseases to provide medical attendance, in order that the lives, not only of the patients themselves, but also of those about them, may not be jeopardized.

A New Preparation of Thyroid.—Switzerland, the classic home of struma, still continues to contribute to the literature on thyroid therapy. In a recent number of the

Correspondenz-Blatt für schweitzer Aertze Professor Dr. Jaquet concludes a paper on experimentation with thyroid extracts and commends a new preparation called aiden. This is a precipitate from a solution of thyroid in normal salt by means of tannin and is said to contain a greater number of the extractive principles of the gland than have hitherto been obtained. It has not yet been sufficiently tried clinically to prove its efficacy, although the results from experiments on animals are promising.

Yellow-fever Quarantine.—In consequence of a yellow-fever case having been found in New Orleans the Texas State Health Authorities established a quarantine against that city on May 30th. On June 2d health officers of Alabama, Mississippi, and Louisiana reported concerning the health conditions in New Orleans to the effect that they could find no other cases of suspicious illness and could not trace the source of infection in the reported case of yellow fever. The investigators considered it unnecessary and unwise for any State or city to quarantine against New Orleans under conditions existing up to that date (June 2d). This report will probably influence the Texas Health Board to withdraw its quarantine.

Harvard's Medical Teaching.—Plans are well matured for the creation of a College of Comparative Medicine at Harvard University, an institution which will promote research work on original lines and with which the different medical departments of the University—the Harvard Medical School, the Harvard Veterinary School, and the Harvard Dental College—are to be coordinated. Three hundred thousand dollars has been set aside for the erection and the maintenance of a laboratory to be named after the late Henry L. Pierce. Six hundred thousand dollars additional will be required. It is proposed that the new college shall give the same facilities for research as the Pasteur Institute of Paris, the Jenner Institute of London, and the Institute of Hygiene of Berlin.

Christian Scientists Held.—Mr. and Mrs. George H. Kinter, Christian-Science "healers," and Mr. and Mrs. James C. Saunders, who are also Christian Scientists, were arrested at Buffalo, N. Y., on May 23d, on warrants charging them with manslaughter in causing the death of the nine-year-old son of the latter, Ralph L. Saunders, who died from pneumonia, and who, during his illness, had no medical care and no treatment other than that given by the above-mentioned "healers." As the death occurred on Federal ground the trial is being conducted under the United States laws before Commissioner Charles K. Robinson, United States District Attorney Close being the prosecuting officer. Mr. Close promises that the prosecution will be vigorous and thorough.

Coroners' Inquests.—After September 1, 1899, by an amendment to the Code of Criminal Procedure of New York State, which is to take effect on that day, coroners will be empowered to conduct inquests without the aid of a jury, except in a county which contains a city of the first class. After that date, therefore, coroners' juries will be impanelled only in New York, Kings, and Erie Counties. However, in New York County, the practice in the coroner's office has been for years, and no doubt is now, in accordance with the following law passed at Albany: "When, in the City and County of New York, any person shall die from criminal violence, or by a casualty, or suddenly when in apparent health, or when unattended by a physician, or in prison, or in any suspicious or unusual manner, the coroner shall subpœna a physician properly qualified, who shall view the body or make an autopsy, as may be required. The testimony of such physician, and that of any other witnesses that the coroner may find necessary shall constitute an inquest." In such cases juries are not called upon.

New St. Vincent's Hospital.—The new Free Hospital for the Destitute Sick, which has been built as an addition to St. Vincent's Hospital, at Seventh avenue and Eleventh street, New York City, was formally opened and blessed by Archbishop Corrigan, on May 30th. The hospital can accommodate, at one time, 1100 patients. The new building is seven stories high and has a frontage on Eleventh street of 145 feet. It is fireproof throughout and is so arranged as to afford plenty of light and pure air. This end is secured by a spacious roof-garden and by the arrangement of an interior courtyard, in which are a lawn, a large fountain, and a number of trees. The medical ward and the gynecological department were furnished throughout by Dr. and Mrs. F. S. Dennis. An X-ray apparatus was provided by Mr. John D. Crimmins. The building will be entirely devoted to free patients. On the first floor will be a dispensary and a reception-room for ambulance cases. On the second floor there will be children's wards. In the remainder of the building there will be six wards for men and three wards for women.

Obituary.—Dr. Henry E. Crampton died at Glen Ridge, N. J., on May 28th. He was sixty-two years old. At the time of his death he was Treasurer of the New York Academy of Medicine and a member of the New York County Medical Society, the Harlem Medical Society, the New York Medical Union, and the New York Genealogical Society. He was a veteran of the Civil War. He was for many years a Vice-President of the Association for Improving the Condition of the Poor. He devoted much time to philanthropic work.—Dr. Norman Shanks Kerr died in London on May 31st. He was very successful in the treatment of inebriety, and wrote a number of works on that subject. He was President of the Society for the Study of Inebriety.—Mr. John Hein, one of the originators of the Brooklyn German Hospital, which has just been opened, died on June 2d. He had been a sickly child and had never been well during the eighty-one years of his life. It is said that in his early youth, feeling that good health would forever be denied him, he resolved that he would devote his life to the accumulation of money with which to relieve the sick and destitute. He gave $30,000 toward the building fund of the Brooklyn German Hospital and $15,000 to the New York German Hospital.

A Psychopathic Epidemic. — Thomas Carlyle said:

"England has sixteen million inhabitants—mostly fools." He who doubts that as regards mankind in general there is a measure of truth in this statement would have had his doubt dissipated had he been at the Metropolitan Opera House in New York on the afternoon of May 28th. The immense auditorium was filled with people, about four-fifths women, who heard a young man give the lie to the wisdom of the ages. The occasion was a glorification of "Christian Science," and the lecture was given by one Mr. Carol Norton, C.S.D., Member "International Board of Lectureship of the Mother Church of Christian Science, Brookline, Mass.," under the auspices of the fourteen Christian Science Churches of the metropolitan district. Examples of the lecturer's fanatical credulity and insane vagaries are the following: "Christian Science has cured and is healing such diseases as locomotor ataxia, blindness, deafness, softening of the brain, paresis, Bright's disease of the kidneys, cancer, tumor, erysipelas, rheumatism, floating kidneys, paralysis, calcareous deposits in the joints, and shaking palsy." . . . "Physicians of both the allopathic and homeopathic schools are now accepting 'Christian Science' as the highest curative method known to the present age." The lecturer was no doubt unconscious of the humor lurking in the following: "Christian Scientists do not administer drugs, refrain from manipulating the body, and therefore cannot be classed as practitioners." A brief notice of some of the tenets of these odd folk may not be *mal a propos*. The teachers of this city would have us know, to begin with, that Christian Science is true because it is founded on reason and common sense. "All in mind—there is no matter." Yet the Christian Scientist eats solid food to nourish a body which he considers does not exist. And he pays a very substantial price for a weighty book in order that he may become cognizant of the mental vagaries which the leader of his sect exhibits therein. "Mortal mind," he tells us, "is error." Yet it is by means of this mortal mind and in no other possible way that he thinks, lives, moves, and has his being, and appreciates the relation of the world external to his *ego*. "The evidence of the senses," he tells us, "is a lie." Yet he relies upon one sense to take him into the lecturer's presence, upon another to find himself a seat, and upon a third to receive the lecturer's statements, which he considers Gospel truth, but which emanate from the lecturer's mortal mind, and are thus conveyed to his mortal mind, both of which mortal minds are in his opinion incapable of appreciating any truth whatever.

CORRESPONDENCE.

THE AMERICAN MEDICAL STUDENT ABROAD.

To the Editor of the MEDICAL NEWS.

DEAR SIR:—Although occasionally one meets in Europe, an American taking the regular university course in medicine, the question of the study of medicine abroad, which is of paramount interest, refers to post-graduate work. Many Americans who intend spending the bulk of their time at Continental clinics and yet possess little knowledge of the required languages think it well to take up work in the pathological or bacteriological laboratories of universities situated in the smaller towns, of which Göttingen, in Germany, will serve as an example. Here social opportunities are greater and through these one may pleasantly further one's knowledge of the native tongue. It may be said, however, that where pathological studies of the nervous system are intended this plan will not do, as the smaller university cities offer few patients, and fewer autopsies of neurological interest.

When able to take the lectures it will be wise to proceed to one of the capitals on account of the greater clinical opportunities. Another reason is that the presence, in the smaller towns, of a considerable colony of foreign students is responsible for the arrangement of courses, which, in a measure, are planned for their needs.

Where only English is at one's command, and but a short stay contemplated, say six months, I think it best to devote one's time to British clinics exclusively. While my personal knowledge refers only to those of Germany and Austria many men met abroad who had spent some time in Great Britain testified to the wealth of clinical material there presented. They added, however, that in the use of the same it was expected that a man must make his own opportunities. Somewhat different from this, the natural aptitude to teach, which belongs to the German, makes no detail too small to bring to the attention of the student and scarcely a scruple stands in the way of using the patient to fulfill every requirement of a clinical demonstration, a factor carried to extreme limits at times.

Of the various university centers Vienna, no doubt, offers the best advantages to do all-around work, because, with a faculty second to none, everything may be accomplished within or near the great complex of buildings known as the General Hospital. Of special importance as regards physical diagnosis is a series of daily demonstrations at the bedside in the internal medicine and neurological wards. Clinical instruction in no other city, not even Berlin, permits an American student, without engaging himself for a specified time, in exclusive service, to daily enter the wards, there to examine an assigned patient, make his diagnosis if possible, and receive a demonstration of the case the second hour by the physician in charge of the ward. When one considers that the assistants are distinguished workers in medical science numbering among themselves such men as the lamented Dr. Müller, whose death from the plague has recently been reported, the high class of the work can easily be estimated.

It cannot be denied, however, that all the special courses (a plan of instruction which the American bent on saving time and imbued with the propriety of paying for what he wants to a great extent avails himself of), are not equally satisfying. For instance, the time was when the foreign student taking a special obstetrical course could attend patients in labor, but no Continental clinic that I know of gives this privilege, upon the above terms,

to-day. Normal cases may be had in some clinics if the student binds himself to remain six months in service. In Berlin, between sessions, in spring and fall, there are two courses which include demonstration on the manikin and attendance outside the hospital upon labor cases, all of which are abnormal. However, the great number who now subscribe reduces the cases appointed to each student to not more than two, while the abnormality may mean a stitch to repair a slightly lacerated perineum quite as well as a version. Moreover, in addition to the considerable stipend, one is obliged to purchase a small paraphernalia, pay one's own cab-hire, and to tip the clinic attendant two marks for each notification. Therefore, these courses, although of some worth, are to-day good ones to keep away from. A number of other vacation courses, however, especially such as are diagnostic in character, afford excellent opportunities and give good returns. The popularity of these classes arises either from the special character of the instruction given, as in the instance just mentioned, which afforded particular opportunities in obstetrics, or from the fact that the first assistant at this time may use the amphitheater of his chief for his special course, and thus being able to lecture to a comparatively large number of students, makes a reduction in price per man for the privilege of personally examining the cases presented. There is, however, much irregularity in this respect; although one can, in Vienna, for a florin a day, continuously obtain the excellent bedside demonstrations in internal medicine and neurology previously noted, one is compelled to pay 2 florins for children's diseases and 2½ florins for diagnostic gynecology and obstetrics. For these reasons, wherever the American student begins his work, let him seek to make a few friends among his countrymen who may best be found in the pathological section at the hour the post-mortems are held.

Men following specialties have this advantage: they will be more apt to have the time to serve as hospitants in the wards for a stipulated time, or as assistants in private clinics, while, for the same reason, they may visit a greater number of universities and thus place themselves under special teachers.

The cost of one's trip naturally depends upon individual demands for comfort or luxury. With care in expenditure $100 per month will carry one through nicely, but if something may be added the opportunity is afforded of spending some of the vacations in travel and so gather the many impressions of various peoples and scenes which add much to the fund of pleasant reminiscences usually carried to home shores.

BERNARD OETTINGER, M.D.

DENVER, COL., June 1, 1899.

KOPLIK'S SPOTS.

To the Editor of the MEDICAL NEWS.

DEAR SIR:—You ask me concerning Koplik's sign in the diagnosis of measles. I am in the habit of watching for it in every case, and by its presence I have been able to diagnosticate subsequent cases occurring after exposure to a previous case before the eruption has appeared on the outer surface. In this respect it is pathognomonic and of practical importance, for, as a consequence, proper treatment can be promptly commenced, and the patient isolated at once. I can safely say that I have observed Koplik's sign in the mucous membranes of the mouth in ninety per cent. of the cases which have come under my care. Truly yours,

J. H. FRUITNIGHT.

161 WEST FIFTY-SEVENTH STREET,
NEW YORK, May 31, 1899.

To the Editor of the MEDICAL NEWS:

DEAR SIR:—Since my communication to the American Pediatric Society, published in the *Archives of Pediatrics*, January, 1899, I have looked for Koplik's sign in all cases of measles seen in private practice. I have not kept any notes of these cases, but I have no hesitation in stating that the "speck" described by Koplik is an important aid to the early diagnosis of measles. I am not positive that I saw the spot in some mild cases, but I shall continue to examine all patients in whom I suspect measles for this early manifestation of the disease.

I have failed to find the buccal spots in children with rubella. I am Yours truly,

WALTER LESTER CARR.

68 WEST FIFTY-FIRST STREET,
NEW YORK, May 31, 1899.

To the Editor of the MEDICAL NEWS:

DEAR SIR:—Replying to your letter of May 18th, my experience with Koplik's sign in the diagnosis of measles has been too limited for me to be in a position to express a positive opinion regarding it.

In a recent case, however, it was of positive value.

Ruth H., aged six years, on May 2d, had a slight dry cough, and redness of the conjunctiva. Her temperature was 100° F., in the forenoon. Thoracic signs were negative, and the fauces appeared normal. May 3d, the temperature was higher. Koplik's spots were seen on the inner surface of the cheeks and under lip. May 4th, the rash of measles was evident on the face and forehead, and in the next twenty-four hours was general. Bronchitis was mild. The course of the disease was uneventful. Very sincerely yours,

W. H. KATZENBACH.

17 WEST FORTY-FIFTH STREET.
NEW YORK, May 25, 1899.

To the Editor of the MEDICAL NEWS:

DEAR SIR:—I cannot give you a very satisfactory answer to your question. I believe Koplik's sign is pathognomonic, and it is my custom to watch for it in all cases of measles. But it so happens that I have seen unusually few cases of measles in the last year, so that my personal experience is not extensive. It so happens, too, that there has been, as far as I know, no paper read on the subject in Philadelphia, and consequently no general expression of opinion in discussion, which has come to my ears. As far as I have heard men speak, it is believed in and sought for.

Sincerely,

J. P. CROZER GRIFFITH.

123 SOUTH EIGHTEENTH STREET,
PHILADELPHIA, May 25, 1899.

BLOODLESS TONSILLOTOMY.

To the Editor of the MEDICAL NEWS.

DEAR SIR:—In your issue for May 27th appears a courteous reply from Dr. Lefferts. In it he asks one or two questions, and they are answered herein. Notwithstanding the fact that I have used the purse-string and recorded the instance to check severe tonsillar bleeding, and that he has not, the Doctor evidently considers that it would be hopelessly difficult. I beg to disclaim any special skill; used as advised, under anesthesia, the bleeding meanwhile checked by finger-pressure, anyone may do it successfully.

In re the case of furious hemorrhage which he describes, Dr. Lefferts asks whether the purse-string would have been applicable.

Why not? With a good light, a good gag, and the patient being in a faint, it would have been simple enough, and without anesthesia. Dr. Lefferts was fortunate in that case. Had the vessels divided been a shade larger probably the violent bleeding would have been resumed as soon as the heart began pumping again —or the surgeon's finger was removed. The purse-string would, however, have made further hemorrhage impossible.

To agree upon this point is less important than to recognize the value of *prevention* of bleeding in this operation. It was to advocate bloodless tonsillotomy, and to describe a case of it by my method, that the letter of May 20th in the NEWS was mainly written, and oddly enough Dr. Lefferts does not touch upon that point at all.

Bloodless tonsillotomy is a *fait accompli*. And while I have never as yet had the luck to meet with such a delightfully histrionic case of tonsillar bleeding as Dr. Lefferts describes, I should suppose that after just one such experience he would be the last man to decry an absolutely certain means of preventing its repetition. In that very case, if he had placed and tightened the purse-string *before* cutting out that tonsil, no blood need have been lost; the patient need not have been seized by the hair; all would have been politeness and decorum. And I do not think that Dr. Lefferts, who (upon theoretical grounds) considers my method so difficult of application to a case already bleeding, will assert the same thing when used as a method of *prevention*.

I must believe that in the future, when the plan becomes better known, it will be regularly adopted, at least in the class of cases where it is at once easiest of application, and where severe hemorrhage is commonest —that is, among adults.

Eucain (preferably) or cocain is first applied, freely and long. Then the four stitches are placed quickly and easily, as described in my letter. We next tie tightly the first half of a surgeon's or friction-knot. The tonsillotomy may now be done practically bloodlessly. After a delay of some minutes to permit of clotting in the divided vessels distal to the ligature, the silk may be loosened. Whether to remove it then entirely or to retain it loosely in place for a day or so as a measure of precaution in such adults, or to retie tightly at once, will depend upon the vascular conditions present when the purse-string is first relaxed after the amputation.

Of course the careful use of the snare would prevent the necessity for the purse-string. But as Dr. Lefferts' personal instance proves, even a specialist at times uses a speedier method and a simpler. And the bulk of the profession unquestionably use, and will continue to employ, the tonsillotome. To do this hereafter without risk of hemorrhage seems to the writer a distinct gain.

Yours truly,

ROBERT H. M. DAWBARN, M.D.
105 WEST SEVENTY-FOURTH STREET,
NEW YORK CITY, May 27, 1899.

OUR PHILADELPHIA LETTER.

[From Our Special Correspondent.]

IMPORTANT ACTION TO BE TAKEN BY THE PHILADELPHIA COUNTY MEDICAL SOCIETY RELATIVE TO REFORM IN THE ARMY MEDICAL DEPARTMENT—SUPPRESSION OF NEWS CONCERNING CONTAGIOUS DISEASES—HEALTH STATISTICS.

PHILADELPHIA, June 6, 1899.

THE Philadelphia County Medical Society, through its delegation to the Columbus meeting of the American Medical Association, will bring to the attention of the Association the subject of reform in the medical department of the army. The general character of the army medical department during the Spanish-American War, the question of political influence in appointing volunteer medical officers, the notorious inadequacy of many parts of the army medical organization, and many other pertinent and vital topics will be considered. The following resolutions will be presented at the Columbus meeting for adoption and presentation to the President: "Whereas, the morbidity and mortality statistics of the late war have served to call to the attention of physicians of the United States the weighty and enlarging problem of the care of soldiers and sailors in peace and during campaigns, under widely varying conditions of climate and environment, now in many respects presenting themselves for the first time; therefore be it Resolved and recommended by the American Medical Association: (1) That the Medical Corps of the Army and Navy be enlarged to meet properly all demands that may be made upon them. (2) That the transportation of medical supplies be under the control of the Medical Department. (3) That a corps of sanitary inspectors be created, whose duty it shall be to examine into the sanitary condition of camps and troops in transit, and advise in relation thereto. (4) That the Government establish permanent camp sites, the selection to be subject to the approval of the surgeon-general, for use in the mobilization of large masses of troops. (5) That a professor of military hygiene be appointed at West Point to instruct the cadets in the principles of sanitation. (6) That the medical officers of the National Guard be subject to a rigid examination both for admission to the service and for promotion. (7) That the surgeon-generals of the army and navy in time of peace and war be empowered to call into requisition the services of skilled specialists. (8) That the President of the United States be respectfully urged to recommend to

Congress the appointment of an Army Medical Commission, to be composed of physicians and sanitarians taken from military and civil life, including the surgeon-generals of the army and navy, whose duty it shall be to prepare a report containing a detailed plan of a modern system to govern the medical departments of the army and navy in peace and war. (9) That a national department of public health be established, with a Cabinet Minister at its head."

The American Dermatological Association, at its annual meeting held in this city during last week, elected the following officers for the ensuing year: President, Dr. Henry W. Stelwagon of Philadelphia; vice-president, Dr. George T. Jackson of New York; secretary and treasurer, Dr. F. H. Montgomery of Chicago; member at large of council, Dr. T. C. Gilchrist of Baltimore. Among the notably valuable subjects presented at the last meeting were contributions on the sensory disorders of leprosy, by Dr. P. A. Morrow of New York; on the rôle of pus micro-organisms in diseases of the skin, presented for general discussion; on blastomycetic dermatitis, by Dr. J. N. Hyde of Chicago, and a general discussion on the pathology of skin diseases. The next meeting of the society will be held in Washington, as a part of the Congress of American Physicians and Surgeons.

The attempts made by the health authorities of this city to suppress the news regarding the prevalence of contagious diseases has met with a prompt and vigorous opposition by the State authorities. The latter body has issued resolutions, couched in unmistakable terms, deprecating this "ostrich-like policy," as they appropriately term it, and issued a statement advocating, for the protection of the public, the fullest publicity and the exact truth regarding outbreaks of contagious diseases. In the case of the present outbreak of smallpox in the suburb of Nicetown the city authorities have pursued such a high-handed policy of concealment, thus preventing residents in the neighborhood of infected houses taking necessary precautions for their own protection, that it is indeed high time that a halt is called on their peculiar methods. Copies of the State Board's resolutions have been presented to the Mayor, the Director of Public Safety, and the Chief of the Bureau of Health.

Col. J. Lewis Good has been appointed the new chief of the Bureau of Health, at an annual salary of $4000. Colonel Good has long been associated with the Board, and has been its acting chief since the disbanding of the old organization by a recent act of Legislature.

The total number of deaths in this city during the past week was 426, an increase of 42 over those of last week, and of 20 over the corresponding period of last year. Of this number, 115 were of children under five years of age.

For Diabetes Insipidus.—

℞ Pulv. opii . . . . . gr. iv
Ac. gallici . . . . . ʒ ii.

M. Div. in chart. No. xii. Sig. One powder three or four times a day.

MEDICAL MATTERS IN CHICAGO.

[From Our Special Correspondent.]

ILLINOIS STATE MEDICAL SOCIETY—ADIPOSE TISSUE AN ETIOLOGICAL FACTOR IN HERNIA—SURGICAL TREATMENT OF HEMORRHAGE FROM GASTRIC ULCERS—ADRENAL TUMORS OF THE KIDNEY—VESICULAR MOLE—JOURNAL ILLINOIS STATE MEDICAL SOCIETY—OFFICERS—CHICAGO HOSPITAL—CHICAGO SOCIETY OF INTERNAL MEDICINE.

CHICAGO, June 6, 1899.

The Illinois State Medical Society held its Forty-Ninth Annual Meeting at Cairo, May 16th, 17th, and 18th. The attendance was small, but notwithstanding this a large number of papers were read, some of which were of a high scientific order. Dr. Alexander Hugh Ferguson of Chicago, read a paper on adipose tissue, an etiological factor in hernia. The evidence which proves adipose tissue to be an etiological factor in hernia is its physical properties; its tendency to accumulate in spaces and cavities, and then to descend; its locality and frequent accompaniment of hernia; its association with the development of certain forms of rupture, the fatty mass forming first and the true rupture following. Small lipomata form in the openings where hernia is most liable to occur, and by intra-abdominal pressure atrophy of the rings occurs; they thin out and weaken and become enlarged, and then the ball of slippery fat urged out by the *vis à tergo* protrudes more and more and drags the elastic peritoneum with it.. If, however, the abdominal wall has no congenital deficiencies in the structures protecting the normal rings a hernia is rare indeed, and no accumulation of fat is liable to take place.

Drs. E. Wyllys Andrews and Daniel N. Eisendrath contributed a joint paper on the surgical treatment of hemorrhage from gastric ulcers, in which they reported two cases, and animal experiments. They reached the following conclusions: (1) The result of the practice of the best modern surgeons warrants the statements previously made on theoretical grounds that only operative interference can save the lives of some of the patients affected with bleeding ulcers of the stomach, namely those not improved by internal medication. (2) Surgical intervention is to be recommended, firstly, in small repeated hemorrhages; secondly, in severe ones, occurring more than once, especially if more than 500 c.c. is lost at each hematemesis. (3) A single copious hemorrhage is not necessarily an indication for operation. (4) In the ulcers at or near the pylorus, pyloroplasty (Heineke-Mikulicz) is ideal. It makes local treatment possible and gives all of the benefits of gastro-enterostomy and is safer. (5) Cauterization and curretting of the ulcer should give place to resection wherever the stomach wall can be reached from without. (6) If adherent posteriorly and at the ends of the stomach, cauterization, curettage, and ligature *en masse* are best substitutes for excision. (7) Ligature *en masse* is shown by the experiments to endanger perforation, except when supported by external sutures.

Dr. Bayard Holmes read a paper on adrenal tumors of the kidney. Grawitz described a group of tumors of the kidney resembling adrenal tissue, which he believed to

grow from fragments of adrenal tissue left in the kidney from the earliest embryonal period. Since that time these tumors have been more or less generally recognized. They appear (1) as masses troublesome only on account of their size, or on account of their tendency to metastasis in the lungs and bones, and (2) as sources of adrenal intoxication, producing a complexus of symptoms diametrically opposite to those of Addison's disease and parallel with the intoxication produced by hypertrophy of the thyroid observed in exophthalmic goiter. The cases presented illustrated both of these manifestations of the disease.

Dr. Carl E. Black of Jacksonville, reported a case of vesicular mole in a patient twenty years of age, accompanied by degeneration and rupture of the uterine wall, and great hemorrhage, necessitating the ligation of the left uterine artery. In this case the mass half filled an ordinary washbowl, and had the appearance of thousands of small white grapes piled up together.

Instead of publishing an annual volume of Transactions, as was heretofore done, the Society will undertake the publication of a monthly medical journal, to be known as the *Journal of the Illinois State Medical Society*. It is thought that this method of publishing the proceedings will materially increase the membership, as fully a thousand copies of the journal will be issued monthly. The new journal will be patterned somewhat after the official organ of the Pennsylvania State Medical Society, whose success in journalizing the proceedings of that body has been remarkable. Its editor will be the secretary of the society, Dr. E. W. Weis, of Ottawa, who is an indefatigable worker, and thoroughly capable of launching and conducting the new venture. The following officers were elected for the ensuing year: President, Dr. Harold N. Moyer, Chicago; first vice-president, Dr. J. T. McAnally, Carbondale; second vice-president, Dr. Weller Van Hook, Chicago; treasurer, Dr. George N. Kreider, Springfield; secretary, Dr. E. W. Weis, Ottawa. Place of next meeting, Springfield; time, third Tuesday in May, 1900.

The trustees of the Chicago Hospital have just had plans completed for what will be one of the finest hospital structures in the city. The cost of the building will be $200,000. It will be located in Fifty-first Street, west of Cottage Grove Avenue, and opposite Washington Park. It is to be in the shape of a wheel, with three three-story wings, forty-six feet in diameter, radiating from the hub. Fireproof construction will be followed, the building having steel frames, red pressed brick interior, with white terra cotta columns, iron balconies at each floor and tile roof. The entrance and rotunda will be of marble. This part alone will cost $45,000.

The Chicago Society of Internal Medicine, at its regular monthly meeting, held May 25th, elected the following officers: President, Dr. John A. Robinson; first vice-president, Dr. N. S. Davis, Jr.; secretary, Dr. Edward F. Wells; treasurer, Dr. M. L. Goodkind, and censor, Dr. Arthur R. Edwards.

OUR LONDON LETTER.

[From Our Special Correspondent.]

SCHOOL PHYSICIANS — ANOTHER MEDICAL HERO — INCREASE OF VACCINATIONS UNDER CONSCIENCE CLAUSE — "TRAGEDIES BOUND IN OAK" — DISAPPEARANCE OF MALARIA IN ENGLAND — MEDICAL RESEARCH SCHOLARSHIPS — LONDON FOG.

LONDON, May 25, 1899.

THE London School of Tropical Medicine has been formally launched upon the charity of the public. At a public dinner, held at the Hotel Cecil, the Secretary of State for Foreign Affairs, Mr. Chamberlain, in an admirable speech, sketched the plan of the scheme and eloquently depicted its many and great advantages. So great were the latter he declared that even the starchy formalism of the great Government Offices, the Indian, the Foreign, the Colonial, had been melted to enthusiasm by it. The scanty metallic deposit which resulted from this melting we have already alluded to, but the long-suffering public has meekly done what was expected of it and made good the deficit. It was announced at the close of the dinner that of the $80,000 required no less than $75,000 had been already subscribed, including the Government's gift of $16,000.

Stirred by the excellent work done and published of late by American and German school-physicians the English profession is beginning to demand a formal and official recognition of its opinion in educational matters. If there be anything which is being more emphasized than another in the new education it is the importance of the physical condition and fitness of the child, and yet the views of the only body of men really competent to give advice on this subject are absolutely ignored in the makeup of the working staff of the school and school board. Curricula are laid out, hours of work fixed, nay even buildings planned and ventilated by teachers and trustees ignorant of the simplest principles of physiology, or of the needs of the growing organism. A physician, as the *Lancet* is now demanding, should be a regular officer or member of every important educational body.

Another name has been added to the public roll of medical heroes (which does not represent a tithe of the actual number) who have risked their lives to save their patients. Dr. R. J. Burns of Sunderland was called to see a man who had attempted suicide by taking a quantity of rat-poison containing phosphorus. The stomach-pump broke down and the brave doctor actually applied his lips to the tube and sucked out the deadly contents of his patient's stomach, thereby saving his worthless life. A more repulsive and dangerous service was never rendered from pure love of humanity, for the patient was a drunken ne'er-do-well, little better than a tramp. It was a beautiful illustration of that noble, old traditional instinct of our profession, of absolute devotion to our patient, as such, regardless of who or what he may be personally. But what of the wife or children or parents of the physician and their rights in the premises? We may not, of course, weigh for a moment the value of our own life as against that of another, but there are others whose rights and interests in us we are morally bound to con-

sider. Dr. Burns' action was magnificent, but it wasn't war, and while we glory in his splendid bravery, we reserve our opinion of his judgment. Fortunately Dr. Burns escaped with a sharp attack of phosphorus poisoning, from which he soon recovered.

Professor Haffkine, who is in England on leave of absence, is to lecture before the Royal Society, upon "Preventive Inoculations," June 8th.

And still that bastard compromise, the new Vaccination Act, seems to be working well in practice. Mr. Collings reported in Parliament a few days ago, that in Ipswich, where the average number of vaccinations for several years past has been 33 per quarter, 198 had been performed in the January quarter of the present year. And these again, as at Oldham, included the families of several hardened "anti" offenders, and even children, for whom an exemption had been taken out only a few weeks before. Truly the "*bete humaine*" can be easier led than driven.

An excellent story at the expense of the profession is going the rounds here. Alexander Dumas, when a young man, was introduced to a pompous old physician who, in a patronizing way, asked him if it were really true that he "made tragedies for a living." "Yes," replied Dumas, "just as you do, only yours are bound in oak."

The recent developments in the natural history of malaria and the desire to obtain material for direct study are calling attention to the remarkable manner in which the disease has disappeared from England. In the great London hospitals it is practically unknown, it is regarded by most general practitioners as a tropical disease, and even in the celebrated Fens of Lincolnshire and Cambridgeshire, where, within the memory of living men, it was as common as in "Injeanny," it is now quite rare. In conversation with several prominent East Coast physicians a short time ago the writer was greatly struck by the unanimity with which they all declared that they had scarcely seen a case of malaria in twenty-years' time. And there is an abundance of low-lying land by both sea and river, indeed, the entire island is like a sponge lying in an ocean bath-tub. *But every acre of it is drained*, and this seems to be the secret of the rapid decline of malaria, for the mosquito cannot continue to breed where swamp-water is not constantly present the year round. Fifty years ago quinin was a regular article of daily diet in Lincolnshire as it is now in the valley of the Wabash, and only a short time since an elderly patient consulted a London otologist for deafness, whose origin he attributed to the large amount of quinin he had taken as a boy in the Fen district. The drain-tile is the chief enemy of malaria, as also of typhoid and pulmonary tuberculosis.

The defeat of the bill compelling shop-keepers to provide seats for their saleswomen by the House of Lords has produced a most unfavorable impression in the profession. No medical man, American least of all, has the slightest doubt of the vital importance of such a provision and the crying need for legislation to secure it, and its defeat, solely upon the ground advanced by Lord Salisbury, in his sudden outburst of ignorant bitterness against it, that "people can usually be trusted to manage their own sitting down and rising up without the assistance of law," a speech which killed the bill after it had passed the Commons and been favorably reported by the Committee in the House of Lords, will be a serious blot upon the reputation of that gentleman in the eyes of the entire medical world.

On every hand the value to the State of medical research is being more and more widely recognized. The Technical Education Board of the London County Council is now cooperating with the Asylums Committee in offering a scholarship of $750 a year, tenable for two years, for the investigation of the preventable causes of insanity. The research is to be carried on in the Pathological Laboratory of the Claybury Asylum.

The Secretary of the British Medical Association announces that the annual sum set apart for grants toward medical research will be allotted June 15th, and the two research scholarships be granted on that date. He, therefore, invites applications from medical men desirous of availing themselves of the assistance of a grant or scholarship in their investigations. The value of the scholarships is $750 and one of them is the Ernest Hart Memorial Scholarship in State Medicine.

A singular case of blood-poisoning has just been reported in London. A woman fell and slightly grazed her wrist and, to protect the injured surface, covered it with stamp-paper, or strips of the gummed paper which borders the sheets of postage-stamps. This adhered firmly and completely sealed the wound, but pain and throbbing quickly set in, septic symptoms developed, and death occurred within sixty hours.

The following medical men were elected Fellows of the Royal Society, at the annual election, last week: Ernest H. Starling, physiologist at Guy's Hospital; Bertram C. Windle, anatomist; Major Bruce of Tsetse-fly fame, and Henry Head.

The National Association for the Prevention of Consumption is making rapid progress, having already a membership of nearly 1500 and some $6000 in its treasury.

It really looks as if the London-fog nuisance was going to be seriously attacked at last. From tables given in a recent lecture by the Honorable Rollo Russell, before the Building Trades' Exhibition, it appears that during the five months of last winter, from November to March, London had less than half the amount of sunshine of inland stations and barely a third of that of the stations on the South coast. As the mortality records show it is this loss of sunshine which is the real damage of fog and not its effects upon the respiratory organs as usually supposed. A fog, suffocating as it seems, really increases the deaths from respiratory diseases but very slightly. An active crusade against this nuisance by compelling the use of smoke-consumers is already on foot.

For Insect Bites.—

℞	Menthol	gr. xv–xxx
	Etheris	ʒ iiss.

M. Sig. Touch the spot with a fine-pointed applicator dipped in this solution. Avoid vicinity of eye.

TRANSACTIONS OF FOREIGN SOCIETIES.

British.

ON THE EXAMINATION OF WHITE BLOOD-CORPUSCLES —ALKAPTONURIA — APPENDICITIS RESULTING IN SUBPHRENIC ABSCESS—ENCYSTED VESICAL CALCULI —PHAGOCYTOSIS OF EXTRAVASATED RED BLOOD-CELLS — TUBERCULOSIS OF THE STOMACH — ARTHROTOMY FOR PAIN AND FOR ABNORMAL JOINT PRODUCTS—THE CAUSES OF DEATH AFTER ABDOMINAL OPERATIONS.

AT the Royal Medical and Chirurgical Society, April 25th, PHEAR read a paper on the clinical examination of the white blood-corpuscles, calling attention to the advantages which fluid films of blood have over dried preparations. In the latter the forms of the corpuscles are distorted, and some of the corpuscles may be washed away in the course of preparation. In preparing his specimens he adds a drop of a two-per-cent. solution of methyl-blue in alcohol, to a small drop of blood on a glass slide, and mixes the two fluids by blowing air on the drop through a pipette. A cover-glass is laid on the drop, and its edges sealed with vaselin. The preparation may then be examined at leisure with an immersion lens. In making blood-counts, a large area should be examined, the larger the better for the purposes of accuracy. The daily variations in the average number of the different kinds of cells are remarkably small. In a healthy individual, the following figures represent the average limits of percentage variation of the different kinds of cells: (1) polymorphonuclear cells, from 45 to 60 per cent.; (2) rounded hyalin cells, from 35 to 40 per cent. (inclusive of lymphocytes from 10 to 20 per cent., and large hyalin cells about 2 per cent.); (3) large oval cells, with irregular nuclei and protoplasm staining diffusely with methyl-blue (a form of cells not described by those who use the dry method), from 5 to 10 per cent.; (4) cells containing coarse oxyphil granules, from 1 to 1.5 per cent.; and, (5) cells containing basophil granules, from 0.3 to 1 per cent. The blood should, if possible, be procured for examination before the first meal of the day has been taken.

At the meeting of May 9th, GARROD read a paper on alkaptonuria. This name is applied to a condition of the urine which causes it to turn a dark color soon after it has been passed. The addition of an alkali makes the change in color still more striking. Such urine will reduce Fehling's solution with the aid of heat, and ammoniacal silver nitrate in the cold. Hence it might easily be mistaken for a glycosuric urine. Only a few cases of the passage of such urine have been reported, but the reader of the paper had opportunity to make examinations in five such. He had come to the conclusion that the essential feature of alkaptonuria is the presence of homogentisinic acid, and that uroleucic acid when present is of the nature of a by-product of abnormal metabolic processes.

PAVY said that he had had experience with five cases. It was curious that the health of the individuals in question was not affected. In this respect one might draw a parallel between alkaptonuria and cystinuria, as the presence of cystin in the urine gives rise to no symptoms unless crystals form.

At a meeting of the Medical Society of London, April 24th, ROBINSON read a paper on some cases of appendicitis in which the pus found its way upward along the colon into the space between the inferior surface of the liver, the upper part of the kidney, and the hepatic flexure of the colon. Sometimes it was difficult to decide whether the route was an intraperitoneal or an extraperitoneal one, but the former seemed more probable.

BATTLE mentioned three instances in which an appendical affection had traveled up the peritoneal surface of the bowel and caused an abscess between the liver and diaphragm.

CLARKE read a paper, May 8th, on encysted vesical calculi, giving an account of twenty-seven cases. If a stone is fixed to the bladder wall, the usual symptoms of calculus, pain, and hematuria, are absent, but there is apt to be cystitis. Most of the encysted stones were near the base of the bladder, and it was often difficult to detect them either with a cystoscope or other instruments. They usually occurred in individuals between sixty and seventy years of age. If possible to grasp an embedded stone, it should be crushed *in situ*, but frequently it was held so firmly that it could scarcely be seen or felt after a suprapubic incision had been made.

FREYER spoke of the rarity of encysted stones, as he had met with only 20 in 2000 cases of vesical calculus, or just 1 per cent.

At the Pathological Society, May 2d, ANDREWS showed pus from an injured knee-joint, illustrating phagocytosis of extravasated red blood-corpuscles by leucocytes. An arthritis had set in seven days after injury, and the joint had been aspirated several times, but no organism could be demonstrated either by examination or by culture. The pus-cells were large and showed numerous included red blood-cells.

STILL reported five cases of tubercular ulcer of the stomach in children, the only ones he had met with in the examination of 226 children with tuberculosis. In all five cases there was extensive tuberculosis of other parts of the body. In one case perforation had occurred but owing to adhesions about the stomach there had been no acute peritonitis.

At the Harveian Society, May 4th, LOCKWOOD read a paper on arthrotomy for the relief of pain, removal of synovial fringes, loose bodies, and fibrocartilages. Four operations upon the wrist-joint were for pain alone. One wrist was found to be tubercular; two were possibly pyemic, and the head of the ulna in the fourth was found to be chronically inflamed and eroded, and was excised. The other cases were drained. In all the relief from pain was immediate and permanent. The knee-joint of a woman was found to present no lesion except the inflammation and thickening of the synovial fringes. The ligamentum patellæ was divided to give a good exposure, and the fringes were excised. The result was excellent. In three cases the internal semilunar cartilage had been ex-

cised. The locking of the joint was in every case relieved, and the functions of the limb were in no case interfered with.

MARSH thought that a transverse division of the patella was the most satisfactory way in which to expose the knee-joint.

ALLINGHAM, who had operated upon fifty cases properly classified under the title of the paper, preferred a longitudinal division of the patella. He had removed the dislocated semilunar cartilage in 18 cases, and sutured it in 13 others.

At the British Gynecological Society, April 13th, SMYLY read a paper on deaths after abdominal celiotomy, mentioning as causes, shock, hemorrhage, ileus, uremia, inanition, tetanus, embolism, and sepsis. He said that shock is a term applied to a group of symptoms which may be due to a variety of causes, but is generally in direct proportion to the magnitude and duration of the operation, especially when associated with long exposure and manipulation of the intestines, to the amount of blood lost, and the cooling of the body generally. No doubt the larger number of cases reported as deaths from shock have been due to loss of blood during or subsequent to an operation.

Ileus is one of the most disappointing sequelæ of laparotomy. The early diagnosis of this complication is of the utmost importance, but unfortunately this is often impossible. When the symptoms set in suddenly with violent paroxysmal pain in a localized position, when the peristaltic action of the intestine can be seen and felt through the abdominal wall, and the patient lies prostrated between the attacks bathed in cold perspiration; when neither flatus nor feces are expelled after energetic efforts to procure evacuation, when vomiting sets in after the second or third day, and the abdomen becomes distended, an error is scarcely possible, but such a stormy onset is exceptional, and most of these symptoms are simulated by other conditions. The obstruction may even be incomplete, and the bowels may be evacuated at intervals, and yet the patient may be lost. In any case active measures should be at once employed to induce the bowels to act, the stomach should be washed out, and copious enemata administered with a long tube, and, when the stomach can tolerate it, calomel, Glauber's or Epsom salts administered. Should these measures fail, the abdomen should be reopened without further loss of time.

Thrombosis occurs from septic infection, or from prolonged pressure of pelvic tumors upon veins, or sluggish circulation due to the quiet recumbent posture or the change in the intra-abdominal pressure due to the removal of large tumors. As thrombus is a potential embolism, and as it may be set free even at a late period, patients should be cautioned against violent efforts or straining for some time after an abdominal operation. Smyly lost a patient three weeks after operation from embolism, brought on by buttoning her boots.

Speaking of sepsis, the reader gave great credit to Lawson Tait and Bantock, saying that the doctrine of cleanliness originated with them and has been based upon their teaching. "Years ago," he said, "whilst most of us were practising antiseptic methods, they, in the face of bitter opposition, insisted upon the importance of perfect cleanliness, and pointed out the injurious effects of chemical substances in irritating and poisoning the tissues."

In the discussion which followed, ELDER took exception to the credit given Tait, saying that he considered that the modern knowledge of asepsis is due to the untiring efforts of Lister.

SOCIETY PROCEEDINGS.

AMERICAN ACADEMY OF MEDICINE.

Twenty-fourth Annual Meeting, Held at Columbus, Ohio, June 3-5, 1899.

THE meeting was called to order by the President, DR. EDWARD JACKSON, in the assembly hall of the Chittenden Hotel. Renewed interest was manifested in the organization by the election of thirty-one physicians to fellowship, among whom were F. F. Whittier of Brookline, Mass., J. E. Brower of Columbus, F. D. Bullard of Los Angeles, W. W. Keen of Philadelphia, Gertrude A. Walker of Philadelphia, N. P. Dandridge of Cincinnati, J. S. Marshall of Chicago, and F. W. Spaulding of Clifton Springs.

The scientific business was opened by the reading of a paper by DR. L. DUNCAN BULKLEY of New York, on "How Far Has Specialism Benefited the Ordinary Practice of Medicine?" By elevating medicine as a science, specialism has advanced its honor as a calling. Special study has classified diseases more clearly and simplified nomenclature. Obscure conditions of disease have been discovered and elucidated. Treatment has been simplified and crystallized, and new methods and measures introduced. All the discoveries and advances made by specialists have been freely given to the profession in current literature and text-books and by means of lectures and clinics every effort is made to enlighten the general practitioner in regard to each branch. The specialist has frequently succeeded in the cure of diseases which the general practitioner has been unable to accomplish unaided, and has often relieved him of great embarrassment. Incidentally specialism has tended to improve the financial relations of patients to physicians and educated the public as to the value of professional services.

The next paper, on "Some Obstructions to the Progress of Specialism in Medicine," was read by DR. G. HUDSON MAKUEN of Philadelphia. The obstructions to the development of specialism are almost wholly within the profession itself, in the attitude of its members toward their patients and toward one another. An innate selfishness and a natural desire for gain engender a foolish spirit of competition which should have no place in professional transactions, where duty to patients demand first consideration. Some illustrations were given of the lack of professional courtesy in the interchange of patients, and an attempt was made to show that this lack of courtesy is the greatest obstruction of specialism in medicine.

DR. L. R. CONNOR of Detroit: Any one familiar with

the history of medicine will recollect two facts, one of which is that great epoch-making discoveries in the past have been from men called general practitioners, as evidenced in the work of John Hunter and Lister, the discoverer of chloroform, and those who have opened up the specialties of disease pertaining to women. I am glad the specialist has come, but still more glad that the general practitioner remains with us.

DR. H. O. MARCY of Boston: I was reminded by Dr. Bulkley's paper of a little anecdote of the First Massachusetts. When on its march there was an overturned engine by the roadway. The commander asked if there was any one in the ranks who could help repair it. Out stepped one of the privates, and said: "I helped to build her, and think I know something of the repairs;" and in a short time it was on the track. There is an illustration of the specialist in the ranks. He was quite ready to carry his rifle or serve his country as best he might, and there came his opportunity to do it in a special way. The ideal physician is the exponent of God's great law; he is the engineer, who like the private understands the repair of the engine. He must be an anatomist, which is the ground-work which makes him what he ought to be.

DR. AUGUSTUS P. CLARKE of Cambridge: Every one must feel that the subject of medicine is too broad for any one person to comprehend and, therefore, there must be subdivisions in the practice. One of the drawbacks to specialism is that the young men want to enter too soon without adequate knowledge. Those who have succeeded best have been those who have walked along the lines of general medicine, have had rough experiences, and have discovered something that has impressed them in connection with some one subject to which they are adapted.

DR. A. GOLDSPOHN of Chicago: Specialism in medicine is an absolute necessity; division of labor is absolutely essential. While it is true that some few discoveries have been made before specialists were distinctly classified as such, they have been made along the line of much digging out, much concentration of thought, and so the advancement of medicine as a whole is in that course, with a few accidental discoveries made by general practitioners. Advancement of medicine is undoubtedly due to this division of labor, concentration in certain lines.

DR. DIDAMA of Syracuse: I was much pleased with Dr. Bulkley's paper, in which he claimed that there were advantages in specialism and that there are dangers; the danger of the general practitioner treating a case that he does not know much about, and the danger of the specialist in thinking he knows it all. There are so many specialists that there is not much left for the practitioner. Going back to the fathers of medicine we know that they did discover something by being general practitioners. Up to a few years ago discoveries were made by general practitioners and I think they are doing very well now. The great danger is that the student, when he receives his diploma, decides that he will be a specialist. He does not like to say it is because there is money in it, but that does influence some of them.

"Ethics of Specialism," was the title of a paper by DR. A. L. BENEDICT of Buffalo. He said in part: The existence of specialism is a departure from the old principle, that the assumption of superior skill is unethical. The specialist implicitly claims such superior skill, if he is honest. Specialism should not consist merely in experience accidentally acquired in general practice. Specialists should always be prepared for emergency practice.

DR. G. HUDSON MAKUEN: It seems to me that the subject is broad enough to occupy our whole attention without bringing into it that which does not rightly belong in it. Ignorance and falsehood are the same thing, whether they are in the daily life of the so-called specialist or the general practitioner. Very much that has been said against specialism, I think, is not against specialism at all. Certain classes of men find in the new order of things a place to hang their complaints upon, and I fear, in our profession, specialism is such a hook to a good many men.

DR. GEORGE M. GOULD: Whatever will be said, the thing is going on. It is in the line of science. Our science to-day of medicine is such an infinite thing that no living soul can amass the knowledge required in any one branch; we will have to divide it in order to conquer. Of course many ignorant men will press into specialism. These are the evils which must be met as evils. One way of meeting these evils is the great improvement in medical education; we are educating our men better. The increased length of the medical course, the higher standards of the initial examination prepare our men better in general medicine and make them understand the general principles upon which any specialty rests.

"The Passing of Materialism," was read by DR. GEORGE M. GOULD of Philadelphia. He said: Some twenty-five years ago materialists and atheists had a weapon called science placed in their hands; and many others using this without a knowledge of psychology and metaphysics rushed into materialism. Herbert Spencer is probably more responsible than anyone else for the materialism of modern scientific thought. The world is, at last, learning that he has contributed little or nothing to the evolution of philosophy and genuine science. This condition is happily passing away. The lessons suggested are: (1) The method of science is by logical and legitimate induction from facts correctly observed, without prejudice or dogma. (2) There is a character or soul-unity in a people, or a school of investigation, which does not change despite a revision of the nomenclature. (3) The individual may be impelled to err from various conditions; prejudice, passion, conservatism, with a resulting injury to the individual. (4) The science of medicine suffers along with this individual injury.

DR. CONNOR: I rise to express my gratitude to Dr. Gould for the presentation of this paper at this time. I don't know whether the presence of Christian Science, or of a pure psychic medicine abroad in the land is the result of the sins of the medical profession in failing to recognize that there is a science outside of the science of matter. And yet I am sure that every practitioner, gen-

eral or special, when he recounts his work will have a conviction that the best of the work he ever did never had any relation to matter. Most of us believe that which retains time and activity acts and operates on as definite lines as do the laws of Nature, and these laws we have not studied to master as much as we might.

At the opening of the meeting June 5th, the nominating committee announced the following appointments: President, G. Hudson Makuen of Philadelphia; first vice-president, Charles I. Plummer of Salt Lake City; second vice-president, A. Goldspohn of Chicago; third vice-president, Edward F. Wilson of Columbus; fourth vice-president, A. L. Benedict of Buffalo; secretary and treasurer, Charles McIntire of Easton; assistant secretary, Walter L. Pyle of Philadelphia. The question of the place of meeting was left with the Council.

The President, Dr. Edward Jackson of Denver, then read his address, entitled "The Doctor's Duty as a Teacher." He said in part: Let us pause a moment to think of those whose work with us has ended. Vermyne, with broad strong face and kindly heart; Carpenter, keen, incisive, highly strung; Rohé, looking on medicine and life from many sides; Pepper, carrying great burdens yet always ready to listen and to give earnest effort for the good of profession or public; Sibbet, patiently working with assured confidence for the future — these have taken permanent places in the storehouse of memory. There can be no doubt but that the founding of the Academy was due to Sibbet. If, as Emerson says, an institution is but the lengthened shadow of a great man, he was the man.

The title of doctor-teacher has been most widely used and most willingly accepted in this country to indicate a membership in our profession. I believe this has come about through some perception, however imperfect, of the fact that the doctor's highest, most prominent, and most important relationship to the community is that of teacher. His function as a dresser of wounds, a remover of diseased tissue, a repository for certain knowledge regarding the action of drugs, and the skill to recognize disease are important ones, and more likely to meet an immediate financial recognition. But all we do in this direction is surpassed by the advice and teaching which enables our patients or the community to best develop and sustain and conserve their vital powers. In addition to this it is well worth while to recall the urgent need of the body social for guidance and instruction from its doctors. At the present time hygiene is practically a special branch of medicine in its wider sense. The teaching of this department has been deficient and one-sided. From the standpoint of racial health and vigor of what avail is it to save from cholera infantum and diphtheria merely to swell the number of cripples, consumptives, and the insane? How insufficient to improve the street-paving and the sewage system for men and women who work with the needle sixteen or eighteen hours a day and live on bread and tea at one end of the social scale, or who do not work at all and live on the stimulants of diet and amusement at the other end?

Until men become wise and virtuous the war against quackery must continue. To destroy the foundations of quackery we must teach the truth that the influence of the drug for benefit is at best but partial, temporary and not unmixed with evil, that cures are wrought by great natural forces which medicines cannot create. The well-being of society demands the full performance of the doctor's service in teaching, the guidance of his thought in its attitude and reaction toward the myriad influences of our civilization that may serve as the normal stimulants of life, or become the starting-points of morbid action, making for racial degeneracy and social death.

"Advertising in the Medical Profession," was the title of a paper by DR. C. T. MCCLINTOCK of Detroit. The writer dealt with advertising in the profession only. In no business, certainly in no profession, are the people so incapable of choosing the good from the poor as in the choice of a physician, as is evidenced by the success of the medical pretenders. Many physicians are giving more time and thought to the securing of patients, advertising if you choose, than to the study of their profession. Many young men are rusting in medicine because their time is taken up in advertising, lecturing in medical colleges, attending medical societies, not to learn, but to become known. There are prominent men who mail five thousand reprints of their papers. Others scatter broadcast illustrated papers showing the "before and after taking" of orthopedic surgery. These are reputable men, college men, prominent men in the profession. Probably the most skilful advertisers are the college professors, working on the students for patients in after years. The sanatoriums are probably the worst offenders in such advertising. The people see nowhere a distinct line separating the reputable and disreputable physicians. It is more than doubtful if the young practitioner, well qualified, who locates in our larger cities would ever meet with reasonable success if he stuck literally to the spirit and letter of the code. Higher education will not solve this difficulty. With every increase in the requirements for the practice of medicine there goes an increase in the number of medical students. The best that can be hoped for is that the profession may assist the people in choosing their physician, so that the most deserving shall receive their dues.

The next paper, by DR. E. STUVER of Fort Collins, Wyo., on "What Will Be the Future Policy of the Medical Profession with Regard to Medical Advertising?" was read by DR. G. HUDSON MAKUEN of Philadelphia. All physicians, from the most eminent to the most obscure should be accorded equal advertising privileges. Professional advertising should be limited to the insertion of plain cards in the local papers or a sign pointing out the location and office hours of the physician. All local notices in which the name of the physician is mentioned in connection with the treatment of cases or the performance of operations should be absolutely interdicted. The public should be educated to regard active participation in promoting the organization of the medical profession and assisting to build up and strengthen medical societies as a criterion of greater professional eminence and distinction than mere local notoriety.

THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

The Association of American Medical Colleges held its regular annual meeting in the hall of the House of Representatives June 5th. An unusually large number of members was in attendance.

DR. J. M. DODSON, junior dean of Rush Medical College, Chicago, read a paper on "The Elective Course in Medical Schools." This was an elaborate attempt to adapt the system which prevails in universities to the medical curriculum. The men who discussed the paper showed that the plan would prove disastrous by leading at once to the development of superficial specialists.

DR. G. C. SAVAGE of the University of Nashville presented a paper on "The Condition of Medical Education in the South." Despite the desperate struggle that had been necessary during the last thirty years to maintain the medical schools of the South, the battle has been bravely won for most of the schools, and the prospect is bright. They are not ready just yet to put into force, at least all of them are not, the four-year's course. The peculiar circumstances under which they had labored demands recognition and continued indulgence of the Association for at least two years longer, at which time they would all expect to come into line on the four-years' course.

The American Medical Association at its meeting in Denver, in 1898, officially accepted the standard of the Association of American Medical Colleges as the minimum standard of colleges that will be recognized by it as entitling its graduates to membership in its ranks. The decision of the Association of Colleges in any individual case is equivalent, therefore, to admitting or excluding medical men from representation in the Association. Admission to membership in the Association of American Medical Colleges is, therefore, sought by all the medical schools of the country. This year the Cornell University Medical College of New York made application for membership, but was refused on the ground that it was graduating men this year on a three-years' course.

After a heated discussion on the part of the Chairman of the Judicial Council, and Dr. Connor of Cincinnati, the mover of the resolution, the following amendment to the Constitution was adopted:

Every penalty for violation of an article of the Constitution (such violation having been reported to the Association by the Judicial Council after due examination made by said Judicial Council), shall be determined by vote of the Association at the annual meeting at which the violation has been reported, a three-fourths affirmation vote of the colleges represented being required for expulsion.

THE NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS.

This Association held its ninth annual meeting June 5, 1899, under the presidency of DR. WILLIAM WARREN POTTER of Buffalo. Addresses of welcome were delivered by GOVERNOR BUSHNELL and DR. CHARLES A. L. REED of Cincinnati, which were responded to by DR. JOSEPH M. MATHEWS of Louisville.

The president delivered his annual address, in which he emphasized the great importance of higher medical education and of more rigid preliminary requirements.

DR. N. R. COLEMAN of Columbus presented the report of the Committee on Minimum Standard of Requirements. The standard of minimum requirements of several States was given. The committee is of the opinion that educational qualifications for entrance to medical colleges must be essentially uniform in order that technical courses of study builded upon them may also conform to each other. In no other way does it seem possible to establish that educational reciprocity which is believed to be desired by all States. In spite of certain objections the committee has adopted as a minimum standard, the four-years' course in the high school, for the reason that the high school is found equally distributed over all the States and Territories. Furthermore, being maintained by public funds it is enabled to furnish the best possible facilities and equipment free of charge to our youth, whereas a college education can be enjoyed by few other than the more prosperous in the communities.

The confederation elected the following officers: President, Dr. J. N. McCormack of Bowling Green, Ky.; secretary-treasurer, Dr. A. Walter Suiter of Herkimer, N. Y.

THE AMERICAN MEDICAL EDITORS' ASSOCIATION.

The meeting was called to order by the President, DR. THOMAS H. HAWKINS of Denver, Col., in the Hall of the Young Men's Christian Association on June 5th.

After the transaction of routine business DR. J. D. EMMET of New York read a paper on "The Ends and Aims of Medical Journalism," in which he prophesied the approach of that millennial time when all medical publications shall emanate from the profession and shall be owned and published by members of the profession, with such a strict censorship that no patent or proprietary drug or surgical appliance shall receive mention therein.

A brief discussion was also held on the relations of editor and author and the rights of each as regards contributed articles. This proved too delicate a subject for general public discussion and it soon became apparent that the rules governing this relation must be formulated by each one for his own guidance. The banquet was held at the Columbus Club, at which covers were laid for one hundred guests. Dr. I. N. Love of St. Louis was elected president for the ensuing year.

AMERICAN MEDICAL ASSOCIATION.

Fiftieth Annual Meeting, Held at Columbus, Ohio, June 6-9, 1899.

(Special Telegraphic Report to the MEDICAL NEWS.)

GENERAL SESSION.

FIRST DAY—JUNE 6, 1899.

AFTER prayer by REV. WASHINGTON GLADDEN, D.D., GOVERNOR BUSHNELL of Ohio welcomed the Association to the capital of the State very heartily and fraternally, recalling the fact that he had been an apothecary himself before he went into the mower and reaper business in another line. MAYOR SWARTZ of Columbus extended the

freedom of the city to its medical guests. The president, DR. JOSEPH M. MATHEWS of Louisville then delivered the president's address. DR. HOLTON presented the account of the Rush Monument Fund. Only three States, Colorado, New York, and Pennsylvania, have fulfilled the promise made two years ago to raise $2000 each. The District of Columbia has given $250, and just before the present meeting California presented $500. The amount of the fund now is $10,582. DR. GIHON, the last surviving member of the original Rush Monument Committee, sent in his resignation. The treasurer of the Association reported $33,760 received during last year. On December 31, 1898, $28,729 was in the treasurer's hands, besides $3000 in the sinking fund.

DR. FENTON of Philadelphia presented a set of resolutions demanding reform in the United States Army Medical Service that will bring it up to date in modern sanitary scientific aspects, and asking that the Association appoint a committee to wait on the President of the United States to this effect.[1] Similar resolutions were presented by the State Society of Georgia. A resolution offered by the State Medical Society of Pennsylvania that opticians are not qualified practitioners and must not be consulted with was referred to a committee for action later. DR. GEORGE M. GOULD of Philadelphia, Pa., presented a resolution providing that the *Index Medicus*, which is compelled under present circumstances to suspend publication, be taken in charge by the American Medical Association; that a suitable editor and corps of assistants to maintain it at its present high standard be appointed, and that the Association guarantee it financial support, not to exceed $3000 to be expended in any year. On motion the resolution was referred to the Board of Trustees for consideration and report next year.

SECTION ON PRACTICE OF MEDICINE.

FIRST DAY—JUNE 6TH.

The Chairman, DR. FRANK BILLINGS of Chicago, called the meeting to order in the Hall of Representatives. He said that an attempt had been made this year to present synopses in the program of the papers to be read. This was the first time that an effort had been made in any of the Sections to do this, and the fact that out of a total of eighty-three papers fifty-four abstracts had been submitted proved that the attempt had been successful. These published abstracts give members an opportunity to acquaint themselves with the subject matter and prepare themselves for the discussions. He desired that original research should be stimulated, especially in the line of clinical work. Reports of cases with full reports on the clinical findings, and, when possible, supported by thorough post-mortem examinations, would be of greater value than papers upon general subjects more or less theoretic in character.

DR. N. S. DAVIS of Chicago read the first paper, entitled

[1] See our Philadelphia Letter, page 735.

WHAT ARE THE PHYSIOLOGICAL PROCESSES OR FUNCTIONS THAT IMPART TO THE LIVING HUMAN BODY ITS VITAL RESISTANCE OR IMMUNITY TO THE ACTION OF TOXIC AGENTS TO WHICH IT MAY BE EXPOSED; AND HOW CAN THEY BE AIDED BY THERAPEUTIC AGENTS?

He said that it is plain that the natural processes or functions which impart to the dying human body its vital resistance, which constitute the *vis medicatrix naturæ*, are, first, the inherent power of selection and rejection possessed by each cell or organized mass of bioplasm of which the blood and tissues are composed; second, the oxidation by which tissue metabolism is effected; and, third, the excretory and eliminating processes by which the products of metabolism and other disturbing elements are attracted from the blood currents and passed out of the system. The vital resistance of any living body may be said to depend directly upon the activity and efficiency of these several physiological functions and processes. The active investigations of the last half century have pretty fairly demonstrated the important etiological fact that nearly all the acute general diseases or febrile affections are caused by toxic agents called ptomains, leucomains, or toxalbumins resulting either from pathogenic bacteria introduced from without or from the retention of excrementitious products of metabolic change within. Both experimental and clinical experience have shown that the external application of water in the form of baths or sponging not only diminishes the fever heat but also increases in a marked degree the oxidation and decarbonization of the blood and the elimination of the waste and toxic products by the kidneys and other excretory organs. Strychnin and digitalis directly increase the action of the respiratory and vasomotor nerves, thereby sustaining the important functions of respiration and circulation. And yet every well-devised experimental investigation has demonstrated that alcohol, chloroform, and ether in the system directly diminish the sensibility and action of the respiratory and vasomotor nerves in proportion to the quantity used, and also markedly record the oxidation and decarbonization of the blood and lessen both the activity of leucocytes and of normal metabolism, thereby placing the effects in direct antagonism to the effects of the other remedies given in conjunction with them. A large part of the prevailing skepticism regarding the curative effects of drugs has resulted from such coincident use of antagonistic agents and the frequent use of agents for the relief of some prominent symptom, while the ulterior effects are injurious to the natural processes of vital resistance instead of aiding the same.

DR. B. M. LINNELL of Chicago followed with a paper, entitled

A COMPARISON OF THE VARIOUS METHODS OF ESTIMATING HEMOGLOBIN.

The two instruments that are most used in this country are Fleischel's hemometer and Gower's hemocytometer. Sources of error are known (1) in color tests. Two eyes rarely agree in accurate estimation of varying shades of color. Eyes of the same individual vary at different

times, due to fatigue and the influence of varying intensities of light. (2) In adding water to dilute the hemoglobin one is apt to over-dilute the solution, thus making it necessary to repeat the test. (3) One cannot make a number of estimates of the same specimen and strike an average. The speaker drew the following conclusions: We need a system of estimating hemoglobin which will eliminate the necessary inaccuracies of color comparisons. Hammerschlag's method is mechanically accurate and eliminates the necessary errors of color comparisons. The errors made in taking the blood are common to both methods. The tests seem to show that the specific gravity varies with the percentage of hemoglobin. Variations under normal conditions in blood are not great enough to interfere with the value of the specific gravity test.

DR. JUDSON DALAND of Philadelphia agreed that so far as color tests are concerned all tests are objectionable. He referred to methods by which he could reduce a certain percentage of error in the use of Fleischel's instrument.

DR. GEORGE DOCK of Ann Arbor, Michigan, thought that the specific gravity methods are easy to carry out, but one should bear in mind that the specific gravities do not always correspond to the hemoglobin present. Gower's method is faulty.

DR. LAMBERT OTT of Philadelphia then read a paper, entitled

THE SPREAD OF DISEASES IN SCHOOLS AND ITS PREVENTION.

The diseases usually spread in schools, naming them in the order of frequency, are diphtheria, scarlet fever, measles, whooping-cough, varicella, and variola or varioloid. There are three common sources of danger, first, being in school during the inception and development of the disease; second, returning to school too early in the convalescence, or permitting children in the infected household to attend school; third, in daily attendance in school during a light and overlooked attack of contagious disease. The common means of contagion or contamination are by personal contact, inspiring exhalations, kissing, by the common use of the drinking cup, by exchanging working material, such as pencils, cleaning-rags, etc., by passing around from mouth to mouth a whistle or a mouth-organ. A grave question arises as to when children should be allowed to return to school during the convalescence of contagious diseases. The speaker's rule is as follows: (*a*) after diphtheria, four weeks from its inception, and after one week in the open air; (*b*) scarlet fever, four weeks from its inception, and after one week in the open air; (*c*) measles, two weeks from its inception, and after one week in the open air; (*d*) whooping-cough, not until every vestige of the cough has disappeared; (*e*) smallpox, two months from its inception, and after one month in the open air.

DR. ARNOLD of Boston referred to an attempt to correct the evil in schools in Boston. In 1894 there was started a system of school inspection. The city was divided into fifty districts and a medical examiner appointed for each district. During the first fourteen months 667,790 pupils were examined, of which number 6053 were not sick, and 10,737 were found to be ailing, of which number 2041 were ill enough to be sent home. Of these, 453 had some contagion and would have been a source of danger if allowed to remain at school.

DR. RAYBURN of Washington, D. C., advised not sending children to school before the age of seven years, on account of their greater susceptibility to contagion before that period.

DR. AXTELL of Denver spoke against the indiscriminate use of lead-pencils in schools. He had once suggested to a lead-pencil manufacturer that it would be a wise plan to incorporate in the black material quinin or some bad-tasting substance to prevent children carrying the pencils to their mouths.

DR. JOHN MUSSER of Philadelphia made a motion, which was carried, that a committee of three be appointed to bring this subject before the General Session for consideration. Dr. Ott was appointed chairman of this committee, with Drs. Axtell and Rayburn.

DR. T. N. MILLER of Rockford, Ill., read a paper, entitled

CEREBROSPINAL MENINGITIS.

Regarding the treatment of this disease he knew of no better remedy than ergot, combined with calabar bean, pushed to its full physiological effect. Bromids are less efficient. Bleeding is bad. While he did not consider opium the "sheet anchor of our hope," yet he could see that it is of great aid in all stages of the disease. Especially in the first three days of the disease he considered the iodids of paramount importance, both from their well-known effects in preventing suppuration and effusion into the ventricles, and also in softening of the brain tissue. He also used counter-irritation. Applications of ice he had never used for fear of the depressing effects upon the general circulation and blood stagnation.

DR. GEORGE L. EYSTER of Rock Island, Ill., followed with a paper, entitled

SOME UNUSUAL FEATURES OF EPIDEMIC CEREBROSPINAL MENINGITIS.

A clinical report of two cases of cerebrospinal meningitis of the markedly intermittent type, accompanied by mucopurulent discharge from the nasal cavities, in which were found large numbers of the diplococcus intracellularis meningitidis was made, with a description of the post-mortem findings.

SECTION ON SURGERY AND ANATOMY.

FIRST DAY—JUNE 5TH.

The Chairman, DR. W. J. MAYO of Rochester, Minn., opened the meeting by reading a paper, entitled

CICATRICIAL STRICTURE OF THE ESOPHAGUS AND ITS SURGICAL TREATMENT,

and said that the treatment of this condition has always been a surgical problem. The number of cases met with are so few that it is a rare condition, yet sufficiently frequent to stimulate our best efforts for its relief

Esophageal obstruction may be classified into, first, those located within the esophagus, as inflammatory strictures, etc.; second, pressure obstruction located without the esophagus, as in tumors involving the thyroid gland, etc. Cicatricial stenosis is the result of the healing of an ulcer which may be produced in many ways. The paper treated of the first of these two classes of cases. The diagnosis is usually easy, the clinical picture being generally a perfect one, and the diagnosis easily confirmed by the passage of bougies. The prognosis in those cases seen early is good. The treatment, briefly stated, is gradual dilatation every other day by bougies before the contraction begins if possible. All foreign bodies should be at once removed, and if the cause of the stricture be either syphilis or tuberculosis appropriate constitutional remedies should be employed. If the stricture be dilatable its treatment depends on its location; if in the vicinity of the cricoid cartilage external esophagotomy is the operation of choice.

DR. JOSEPH RANSOHOFF of Cincinnati then read a paper on

CONSIDERATIONS ON THE DIAGNOSIS AND TREATMENT OF GALL-STONES,

and said that little is known of the etiology, but perhaps excess of cholesterin in the bile is the cause, the nucleus around which they form being either of helmic or bacterial origin. The diagnosis is usually not very difficult, and the operation of choice should be cholocystotomy with the establishment of a biliary fistula. Out of forty-six cases only three deaths resulted.

DR. A. J. MCCOSH of New York read a paper, entitled

OBSERVATIONS ON THE TREATMENT OF GALL-STONES.

The surgeon generally sees these cases early in their course. The decision as to the best method of treatment is often most difficult. Distention of the gall-bladder will often occur when the cystic and common ducts are entirely free. Jaundice is not always dependent on the obstruction of these ducts. A stone in the common duct will not always cause distention of the gall-bladder, but instead it will shrivel up. In nine cases of operation for stone in the common duct in not one was there dilatation of the gall-bladder. In one case a stone the size of a goose-egg was found occupying the entire common duct. The stone was four and one-half inches in length and six inches in circumference. The gall-bladder and passages are very easily infected. This is proven by the fact that in nearly every case of typhoid fever there is an infection of the gall passages with the typhoid bacillus. It is often difficult to know when to stop palliative measures and to resort to surgical interference, which should not be put off too long. The longer the operation is postponed the greater becomes the mortality, and thus avoidable delay is fatal to the patient's chances. Cholocystitis often calls for operative interference, especially if there is no change for the better after a fair trial for a week or ten days of palliative measures. Repeated gall-stone colics is an indication for operative interference. Jaundice which persists may not be due to an impaction of a stone, and just when to operate is hard to determine. Timely operation should be performed in every case after a correct diagnosis has been made.

DR. W. E. W. DAVIS of Birmingham, Ala., then read a paper on

SURGERY OF THE COMMON BILE DUCT.

The surgery of the biliary ducts is still in its infancy. After reviewing the etiology, symptomatology, and treatment, he said in conclusion that cholocystotomy with drainage is the ideal operation. Sutures, as a rule, are not necessary, and in many cases are a distinct disadvantage.

DR. H. O. WALKER of Detroit opened the discussion on these papers and said that there is no necessity of draining in these cases. The purse-string suture answers every purpose and unless there is distinct indication for drainage it should not be employed.

DR. BEVIN of Chicago said he believed the majority of gall-stones are mycotic in origin, and they have been artificially produced in the French laboratories. The best incision for ordinary cases is one through the rectus muscle, enlarging it if necessary at either or both ends to an S shape.

DR. R. T. MORRIS of New York said that he generally closes up the gall-bladder by a purse-string suture.

DR. MURPHY of Chicago said that all his experience proves that early operation is most important in the treatment of these cases. The diagnosis should be promptly made and the operation follow soon after, especially when there is high temperature and evidences of systemic infection.

DR. FERGUSON of Troy, N. Y., said that there is no way of determining when the biliary tracts are entirely free from stones and that the best method of treatment is by drainage.

DR. PORTER of Fort Wayne, Ind., said there are two objections to the immediate closing of the gall-bladder: first, because in many cases permanent drainage for a long time is necessary to effect a cure; and second, one can never determine when the common duct is free from disease.

DR. WARNER of Columbus said he believes in early operation as it is accompanied by a lower mortality. The use of olive oil is a relic of barbarism and ignorance and it is an absolutely useless method of procedure.

DR. RODMAN of Philadelphia said that out of 106 cases in which he had operated only one was in a full-blooded negro.

DR. MOORE of Minnesota said there are many cases of cholocystitis in which gall-stones are a causative factor, especially as a secondary condition to the mycotic diseases.

DR. MARSHALL of Boston advocated the primary closure of the wounds in either gall-bladder or duct, and also the closure of the skin incision without drainage.

DR. MARCUS DAVIS said he had had one case of distention of the gall-bladder in a full-blooded negro.

DR. RANSOHOFF, in closing, said that but little is known of the etiology of gall-stones in the human being except that they often follow typhoid fever.

DR. A. J. ACHSNER of Chicago followed with a paper, entitled

APPENDICITIS AS A CAUSE OF INFLAMMATION OF THE RIGHT OVARY AND TUBE,

and after reviewing, at great length, the literature of appendicitis, said that he was convinced that many cases of inflammation of the right ovary and tube are secondary to a primary infection of the appendix. This is especially true in those cases in which the lesion in the appendix goes on to abscess formation. The differential diagnosis is difficult and oftentimes impossible. In 103 cases in which he removed the appendix, 53 were in females and 15 had a secondary involvement of the tubes and ovaries. In conclusion he thought that appendicitis is a frequent cause of tubal and ovarian disease, both acute and chronic, and the exact origin of every case of this character should, if possible, be determined.

DR. JOHN B. DEAVER of Philadelphia then read a paper, entitled

COMPLICATIONS AND SEQUELÆ OF APPENDICAL ABSCESS.

Of all complications of appendicitis the most frequent and fatal is peritonitis. When general this is not amenable to successful treatment. In not a single case of general peritonitis in his experience had operation proved successful, despite the fair trial of every form of treatment. This condition when present is an absolute contraindication to operation. Constitutional septic infection as the result of appendical inflammation may present clinically the appearance of typhoid fever and be difficult of diagnosis. Secondary abscesses of the peritoneum more or less localized by adhesions are not infrequent. The hepatic complications are of extreme interest and importance, and abscess of the liver, either single or multiple, may so mask the symptoms of the primary infection that only by the post-mortem examination is the surgeon made aware of the pyogenic focus in the appendix. Extension may also occur from the liver to the pericardium or pleuræ and demand operative interference for its relief. That metastatic abscesses may form in the liver, lungs, spleen, or kidney is often proved by post-mortem examination. Complications nearer the source of infection are iliac phlebitis, or rupture into one of the hollow viscera,—the intestines, the bladder, or the pelvis of the kidney. The abscess may be part cecal, or it may involve the post-peritoneal connective tissue. Appendical pus may occur in a terminal sac, or it may be a serious complication of pregnancy. Its effect upon the reproductive organs of the female are most serious. The bladder wall and the sigmoid are here perforated and the organs covered by dense quantities of exudate in which are localized abscesses. These complications of the disease are just so many strong reasons for early operative interference. If this be resorted to the seat of inflammation is removed before there is time for pus formation, and thus the terrible ravages produced by appendical pus, no matter what its situation, are prevented.

DR. ROBERT T. MORRIS of New York followed with a paper on

BAD METHODS IN APPENDICITIS,

and said that sociological conditions are of great importance. Especially bad is the practise of surgeons who make too favorable statements in regard to this disease, particularly in lay journals. The best method of treatment is immediate operation, and it should never have a higher mortality than 1 or 2 per cent.

DIAGNOSIS AND TREATMENT OF APPENDICITIS, WITH REPORT OF ONE HUNDRED CASES

was the title of the next paper by DR. W. J. MEANS of Columbus. He said that he had treated 112 cases of appendicitis, 8 by operative measures. Two of these patients died. The remaining 30 patients were treated medically and only 1 died. Appendicitis is essentially a surgical disease. The medical treatment gives relief, never a permanent cure. The only question to be decided is as to the most opportune time to operate. This cannot be settled by fixed rules. Each case must be treated on its merits, but a good working rule is to operate in every case just as soon as the diagnosis is made.

DR. W. W. KEEN of Philadelphia opened the discussion and said that a general purulent peritonitis meant to him an absolute indication for immediate operation. These cases are not all without hope, for in five cases in his experience which were apparently hopeless an operation resulted in a cure. It is not right to lay down a general rule that every man must operate on every patient ill with appendicitis, but every case must be treated as its symptoms demand.

DR. J. B. MURPHY of Chicago said that though cases might be mild for the first twenty-four hours no man can say how long they will remain so, and therefore it would seem to be best to remove the appendix while there is yet time, and so operate within the first twenty-four or at least in the first forty-eight hours.

DR. GRANT of Denver, Col., said that the mixed method of treating appendicitis has a higher mortality than 2 per cent. Each case must be treated on its merits, and operation in the first twenty-four hours gives the best chance and will give a much lower mortality.

DR. MCARTHUR of Chicago said that he had operated on 137 patients with appendicitis in the interval between attacks and in not one of them was there a fatal result.

DR. JOHNSON of Hartford said that he had performed more than 100 operations on diseased appendices without a death.

DR. GRAHAM of Chicago said that he was governed by the circumstances of the case and not by any set rules of procedure.

DR. ERNEST LA PLACE of Philadelphia said there is no fixed rule to go by. In the majority of cases prompt operation offers the best chance of life.

DR. PORTER of Fort Wayne said that he had seen patients with general purulent peritonitis recover and that operation gives them their only chance.

DR. A. J. OCHSNER of Chicago said that he has had many cases of general purulent peritonitis in which the patients were treated by opening the abdomen, but they all died. He now treats them by stopping all food by

the mouth, but feeds them by enema; cold is also applied to the abdomen. He has treated quite a few patients by this method, with very satisfactory results.

DR. DEAVER, in closing, said that he wished to repeat that he never had seen a case of general purulent peritonitis in which recovery took place. It is impossible to lay down any general rule of procedure until the belly walls are made transparent and one can see just what is going on in the abdomen. It is not right for inexperienced men to attempt to remove appendages, as it is a most difficult and serious operation.

DR. EMIL RIES of Chicago then read a paper on

SOME RADICAL CHANGES IN THE POST-OPERATIVE TREATMENT OF CELIOTOMY.

He gets his patients out of bed twenty-four hours after vaginal celiotomy, and they leave the hospital in four or five days. Large doses of salts are not given on the morning subsequent to the operation, the bowels being generally left to Nature. The patients, instead of being starved on liquid diet, are fed on meat, bread, etc., just as soon as peritonitis is found to be absent, at the end of twenty-four hours. The same after-treatment is followed after laparotomies.

DR. T. H. MANLEY of New York said that the paper was a most valuable contribution to our knowledge and is a distinct advance in surgical science.

DR. F. H. WIGGIN of New York said he had had a similar experience to the one detailed by the author of the paper, in which the patient left her bed for a few minutes ten hours after a laparotomy and no bad results followed.

SECTION ON GYNECOLOGY.

FIRST DAY—JUNE 6TH.

The meeting was called to order at 2 P.M. by DR. W. D. HAGGARD, JR., the secretary.

The Chairman, DR. A. H. CORDIER of Kansas City, Mo., then read his address and said in part: The supreme benefit of this annual meeting exists in the remembrance of the priceless works of those who attend and enter into these discussions.

One of the most important subjects coming before this Section is that of cancer of the uterus. The early detection of a gonorrhea and its proper management by the necessary local treatment and the avoidance of intra-uterine sounding has materially reduced the number of tubal and ovarian specific diseases. In all cases of ectopic pregnancy operation should be performed as soon as the diagnosis is made, unless in the latter months of pregnancy.

The subject of most importance to the Section in the line of infective processes is puerperal fever. The use of immunizing and curative doses of the streptococcic serum obtained from animals infected by a number of different streptococci, as in the laboratory of Louvain, has been the latest effort for cure in this direction. Credé ointment of silver in the treatment of puerperal sepsis has been remarkably successful.

PELVIC TUBERCULOSIS

was the title of a paper read by DR. AUGUSTUS P. CLARKE of Cambridge, Mass. The sources of contamination of the serous tissue are numerous, the principal avenues of entrance being from the intestinal tract. The adhesions of the intestines with the Fallopian tubes, and the subsequent ulceration or perforation of the united surfaces furnish one means by which the bacilli reach the adnexa. In many cases tuberculosis of the genital tract occurs in connection with the general dissemination of the disease of the other organs. This not infrequently takes place in childhood and before puberty. Tubercular lesions of the adnexa originating through the general blood-supply cannot be regarded as a common process. The forms of tuberculosis of the Fallopian tubes may be reduced to the miliary and the fibroid varieties; in the former the disease may remain latent for varying periods. Here a mere abdominal incision may be followed by apparent recovery, though it is not safe to regard such recovery as permanent. The chronic form of fibroid tuberculosis may become arrested or end in recovery.

The general infection of the organism from extraneous sources has undoubtedly been the more frequent mode of the inception of pelvic tuberculosis. Tuberculosis of the Fallopian tube has in many cases supervened upon catarrhal salpingitis. As stated by Williams and others, tuberculosis of the uterus, ovary, or Fallopian tube, must be regarded as secondary to primary areas of infection. In all cases of doubtful character the purulent exudation of the vaginal and uterine tissue should receive repeated microscopic examinations. When an exact diagnosis cannot be reached an abdominal incision may be demanded for the relief of symptoms.

DR. HOWARD A. KELLY of Baltimore said that a large percentage of our gynecological work is in this condition, and, therefore, the subject is most important. He felt sure that the condition has nothing to do with coitus. The disease localizes itself in the tubes. It is, however, found in the uterine body in a much larger percentage of cases than is commonly believed. As in tubercular disease elsewhere we ought to remove all diseased tissue. He had in two instances, however, been compelled to leave the diseased tubes, and both the patients recovered. He thought that when one opens the abdomen in tubercular cases one ought to examine the extent of the lesions, and determine how far the disease extends over the peritoneum.

DR. E. E. MONTGOMERY of Philadelphia said that he wished to put on record a case in a young girl, aged thirteen years, in whom there was tubercular disease of both ovaries and tubes. There was no involvement of the peritoneum beyond these organs. A singular feature of the case was that the girl had a tumor, apparently of the bladder, which, upon careful investigation through the urethra, was found not to involve the internal surface of the bladder. Upon opening the abdomen for the removal of the tubes, which was the first intention in the case, it was found that the tumor of the bladder was attached to its peritoneal surface, and contained a diverticulum from the bladder. The patient had been suffering for some time from inability to retain her urine. As the

peritoneum covered the surface nothing was done but a removal of the tubes and ovaries, and subsequently the bladder was distended by irrigation. Under this treatment she was able to retain her urine for at least three hours, and was much relieved. She has continued to gain in health since the removal of the diseased organs.

DR. A. GOLDSPOHN of Chicago said that he agreed with Dr. Kelly in the remark that tuberculosis of the tubes is more frequent than we have thought. He was not willing to say that the uterus should be removed when tuberculosis is found in the adnexa. The better part of operating in gynecology is to preserve the female organs, particularly in young persons, to the extent that the individuals will menstruate. As we strive to the utmost to save the uterus and a part at least of one ovary for this purpose, it seemed to him that it is rather indicated to leave the uterus and half of the ovaries even when the tubes are removed.

DR. C. C. FREDERICK said that the question of tuberculosis of the uterus and adnexa and the remarks of Dr. Kelly with reference to leaving some of the tuberculous organs in situ led him to speak of a case that he had had for about five years in a young woman who was tubercular. He removed both ovaries and uterus. Whether the cervix and the glands outside were diseased or not she made a good recovery. Subsequently there was a localized tuberculous abscess on the left side which he opened through the vagina, and which has continued to drain despite all efforts that he had been able to direct against the tuberculous process, and she now has developed general pulmonary tuberculosis.

DR. C. E. RUTH said that about four years ago he had operated upon a colored woman for a forty-pound ovarian cyst. The peritoneum was thickly studded with tubercular deposits. He simply ligated off the entire omentum and removed the tumor. The patient did well and seemed to be none the worse for the loss of the omentum, but died last winter from pulmonary tuberculosis.

DR. CARSNER said that tubercular deposit is often limited to the appendix exclusively, and certainly does not come from the vagina and tubes, which shows beyond any doubt that tubercular deposits in the peritoneum will not spread from the vagina and reach the peritoneum in that way. He agreed with Dr. Goldspohn, that it is not necessary to remove the tubes. For simple tubercular peritonitis he simply irrigates, and if there is degeneration he removes the organs.

DR. J. F. W. ROSS of Toronto said that he had found the disease to be more frequent in young unmarried women in whom there was no question of coitus, and therefore it does not come from the vagina. A cure by abdominal operation is among the marvels of our work.

CHOLECYSTECTOMY.

In a paper with this title DR. CLINTON CUSHING of Washington, D. C., said that for the purpose of the paper it would be assumed that the gall-bladder is not necessary to the health or well-being of the individual, for many cases are on record in which the gall-bladder has been removed and the patients have remained in perfect health. Investigation has shown that it is of no value to the digestive function. If the gall-bladder is so seriously diseased as to warrant surgical operation for its relief, it is better practice to remove it in toto than to leave it in place for the further accumulation of gall-stones or as a point for setting up new inflammations. Like the vermiform appendix the gall-bladder is a cul-de-sac, and having been once diseased is likely to become diseased again.

DR. DAVIS of Birmingham, Ala., said that one argument against the removal of the gall-bladder is that it is difficult to determine when the common duct is free. If one ties off the gall-bladder, one subjects his patient to great danger. If, on the other hand, cholecystotomy is performed the patient is put in the condition that the surgeon can perform the other operation later. The operation advocated by Dr. Cushing, he thought, is the one to adopt in case of marked disease of the gall-bladder. In his opinion but little advance has been made in gall-bladder surgery since the operation devised by Sims, except that the gall-bladder should be attached to the peritoneum.

DR. SUTHERLAND of Nebraska said that a great mistake is made in the early treatment of these cases by giving sedatives for the relief of paroxysms. He recently had three patients to whom he had given doses of sweet-oil internally, 8 ounces at each dose, two doses, four hours apart. In this way he had removed gall-stones almost double the caliber of the duct. The stones were passed about twelve hours after the first dose of oil. One is too prone to give hypodermic injections of morphin and allow these stones to remain.

A NEW OPERATION FOR THE CURE OF UTERINE RETRODISPLACEMENTS

was the title of a paper by DR. C. E. RUTH of Keokuk, Iowa. An incision is made at or near the median line above the pubes. The length of the incision depends upon the thickness of the abdominal wall. The uterus is brought forward and a large, ordinary, full-curved needle, or, if the operator prefers, a needle with the eye at the point, armed with a full-sized kangaroo tendon is passed under the peritoneum directly across the anterior surface of the uterus, then along the interior of the round ligaments, or when they are absent or practically so, simply along the interior of the peritoneal fold, which represents the course of the round ligament. When the abdominal ring is reached the needle no longer follows the round ligament but pierces the abdominal wall directly opposite the ring and emerges through the skin in contact with Poupart's ligament, near its middle, on one or the other side. The needle is now unthreaded, the end of the tendon split, say two inches, one-half is again threaded into the needle and passed under Poupart's ligament and the opposite side of the same, and the ends are next tied together over the ligament. The long, round ligament will thus be thrown into numerous folds and convolutions as it is taken upon the running thread.

The life of this material is at least two months and if

necessary it might probably be made longer. The operation does not expose denuded traumatized surface, and troublesome adhesions are not formed; it does not introduce any foreign material permanently; it enables the natural supports to take up the work successfully; it gives the desired position to the uterus; it leaves the uterus with ample mobility; it does not interfere with the development of any part of the uterus; it is quickly done and gives every opportunity for dealing with any ovarian, tubal, or uterine pathology with but a single wound.

WHY VAGINOFIXATION AND VENTROFIXATION AND SUSPENSION OF THE UTERUS SHOULD BE AVOIDED IN WOMEN WHO RETAIN ANY CAPACITY FOR CONCEPTION

was the title of a paper by DR. ALBERT GOLDSPOHN of Chicago. He said that these operations are unnatural, unsurgical, and unscientific. The wide range of the body of the uterus, which is so necessary, is secured chiefly by the total absence of all connections or attachments to its vertex and its anterior or posterior surfaces. Therefore the thought of opening the abdomen and inflicting fixation upon any one of these surfaces destined to be free and thereby limiting the normal mobility of the body of the uterus in some degree is repugnant to every rational instinct.

There are other surgical expedients quite generally available that are entirely within the domain of normal anatomy and physiology, that help Nature, and are assisted by Nature because they exercise a parallelism and no antagonism of forces. The only normal structures that exist and can be consistently made use of are the round ligaments of the uterus. They may be dealt with (1) by median ventral celiotomy; (2) by anterior median, vaginal celiotomy, and (3) by way of the inguinal canal.

The original Alexander operation, greatly modified and improved, is the only operation practised or proposed that not only does not borrow from things pathological and antagonistic to Nature, as do all ventral attachments, and does not create obstacles to gestation or labor, but also guarantees against a return of the retroversion afterward, provided that the operation is properly performed. And when this modern Alexander operation is combined with inguinal celiotomy by way of the temporarily dilated internal inguinal rings, for the severing of adhesions, for the resection or removal of diseased appendages, and for the permanent restoration of descended ovaries to their normal locations, it most nearly fulfils the highest ideals now entertained.

DR. C. C. FREDERICK of Buffalo, during the discussion of this paper, said that after some experience with ventrofixation, and discarding it because he feared it from the experiences of others, he since had had a number of cases of pregnancy following the operation, and none of the patients aborted and none suffered inconvenience. All went successfully through labor, and all have had an anteroposterior position of the uterus after labor, with no pain or distress. He never performs ventrofixation unless it be to sustain the uterus in cases of paralysis. He has removed the tubes and ovaries in women only who have passed the menopause. He has either shortened the round ligaments or performed the modified Alexander operation.

DR. ROSS of Toronto said that he had very pronounced views on this subject. He believes the operation of ventrofixation to be anatomically and physiologically unsound. The statistics presented by Dr. Goldspohn convinced him that his own views were correct. The large number of cases in which difficult labor and intestinal obstruction has been found to be the result of this abnormal position of the uterus, show conclusively that if the Creator intended the uterus to have a ligament in that place He would have put it there. The mechanism by which the uterus is suspended is perfect. The Alexexander operation has been too highly estimated in the opinion of Dr. Goldspohn. There are other operators who have given us adverse opinions regarding its benefits. Cases have been reported in which hernia has followed it. The only method which meets with his entire approval is the intra-abdominal shortening of the round ligaments, an operation which apparently is not entirely free from danger. He had had one melancholy experience with it within the last year. He considered that many of the young girls operated upon do not require any operation at all, and that the symptoms are not due to the flexion of the uterus.

SECTION ON DISEASES OF CHILDREN.

FIRST DAY—JUNE 6TH.

DR. HENRY E. TULEY of Louisville, Ky., Chairman.

DR. ERNEST WENDE of Buffalo, N. Y., read a paper, entitled

THE DEATH-DEALING LONG-TUBE NURSING-BOTTLE.

He has demonstrated by bacteriological experiments that it is impossible to clean the tubes of nursing-bottles. The rubber is affected by microbic action, cavities occur in it, especially near joints, and the rubber itself acts as a culture medium. Used tubes left in an incubator for twenty days become disintegrated by the action of the infecting bacilli, and in some cases liquefied, while control-tubes were practically unchanged. These changes in the substance of the rubber make all attempts at cleansing illusory.

In the discussion DR. NORBURY said that the same thing holds good in the case of rubber nipples. The surfaces to be cleansed are easier to reach, but unevenness caused by microbic action and the growth in the substance of the rubber make bacteriological cleanliness practically impossible.

DR. WENDE said that the prohibition of the long-tube nursing-bottle in Buffalo has cut the infant death-rate in two. Eight out of ten of the deaths in children that formerly occurred were in infants using the long-tube bottle.

DR. E. H. MCCLANAHAN of Omaha, Neb., read a paper, entitled

CONSTIPATION IN INFANTS.

For this there are two causes, diet and anatomical conditions. Dietary constipation is due to too little fat and too much casein. Fat should be added to the milk or if

the stools are light-colored and dry, showing too much casein, that element should be reduced and the milk peptonized. A spoonful of maltine is a good corrective under these circumstances. Of drugs, two are worth noticing, podophyllin and phosphate of soda in combination with orange-juice. For atonic intestinal conditions the insertion of the finger into the anus is not only of diagnostic value, enabling the physician to assure himself that no abnormality is present, but is also a valuable therapeutic measure, stimulating peristalsis. The greased index-finger may be introduced up to the sigmoid flexure. External massage is of great service in these atonic conditions.

DR. C. G. SLAGLE of Milwaukee, Wis., said that chronic constipation in children is often due to the use of such teas as fennel or anise, given as supposed stomachics or colic-cures, or to the abuse of laxative remedies whose after-effect was astringent, or to opiates and patent nostrums for colic. These causes must be guarded against.

DR. BARNES of Washington, D. C., said that the mother may form the child to habits of regular defecation very early in life. For this the use of simple suppositories is a great help.

DR. J. A. WORK of Elkhart, Ind., insisted on the necessity for loose clothing if the child is not to be constipated.

DR. GARRISON suggested that more water must be added to the food of constipated children, but that if plain water be given it is excreted by the kidneys; if some salt be added, for example, bicarbonate of soda, it affects the intestinal excretion favorably.

DR. FRANK X. WALLS of Chicago then read a paper, entitled

SO-CALLED CONGENITAL OBLITERATION OF THE BILE-DUCTS.

This affection is usually fatal, and is due at times to an anomalous development of the biliary tract, at times to adhesive angiocholitis. Catarrhal icterus is very rare in children, but when it occurs the serious form should be thought of at once, and if the affection does not yield promptly to treatment operative interference should be considered. The disease is commoner than the statistics indicate and its treatment is surgical rather than medical.

SECTION ON MATERIA MEDICA AND THERAPEUTICS.

FIRST DAY—JUNE 6TH.

The section was called to order by the Chairman, DR. L. L. SOLOMON of Louisville, Ky.

DR. JOHN A. CUTTER of New York read a paper on

NON-DEPRESSANT ANALGESICS.

The paper was an enthusiastic advocacy of ammonol, and met with a severe handling by the members of the section on the ground that the article recommended was proprietary.

DR. C. C. HERSMAN of Pittsburg then read a paper on

PARALDEHYD AS A HYPNOTIC AND AS AN ANTIDOTE TO STRYCHNIN.

The author recounted some animal experimentation tending to establish the efficacy of the drug as a hypnotic and an antidote to strychnin.

SOME THOUGHTS ON URETHRAL THERAPY

was the title of a paper by DR. T. A. HOPKINS of St. Louis. He spoke of the use of argonin, commending it for its analgesic and therapeutic effects. This drug, being proprietary, the paper aroused the displeasure of the listeners, and the discussion of proprietary drugs in general which followed was exceedingly warm.

DR. LOUIS F. BISHOP of New York then read a paper on

THE USE OF ACETANILID IN VARIOUS COMBINATIONS AS A SUBSTITUTE FOR MANY PROPRIETARY DRUGS AND MIXTURES.

It is better to know one drug well than many superficially. For a long time he had prescribed acetanilid in combination with such drugs as seemed to him synalgesic in the condition to be met. Acetanilid is not soluble, but is readily suspended in syrupy mixtures, so that it can be combined with ammonia in any of its forms, salicylic acid, nux vomica, digitalis, codein, creosote, potassium bromid, or indeed almost any drug, and a prescription obtained that can be much more accurately adapted to the case in hand than any of the ready-made combinations. The foundation of most of the coal-tar product combinations is acetanilid, which has been combined with bicarbonate of soda, caffein, carbonate of ammonia, etc. The combination may be chemical or mechanical, it matters little which as it is practically broken up in the body into the acetanilid radicals and the other constituents. It is much more professional and scientific to write for the mixture than to be slaves to a proprietary combination. Perhaps the most generally useful combination of acetanilid when used as an analgesic is the migraine tablet. This is the equivalent of several of the most widely used secret mixtures that are sold under a specific name. It consists of 2 grains of acetanilid and ½ a grain each of caffein citrate and monobromate of camphor. A useful combination that can be prescribed in capsule is acetanilid and quinin, 1 grain of the former and 2 of the latter. This makes a good adjuvant to other treatment in cases of coryza. In rheumatic conditions, and those in which there is a suspicion of intestinal fermentation, acetanilid and salol make a good combination in capsule. For disturbances of circulation and neuroses attending the menopause 2 grains of acetanilid and 15 grains of bromid of sodium are efficient when combined in a dram of simple elixir. When repeated sufficiently often in this form it acts as an efficient hypnotic. Acetanilid is a useful addition to mixtures for the relief of acute indigestion attended by flatulency and great distress immediately after meals. As a substitute for iodoform and a host of antiseptic dusting powders, acetanilid has been found most efficacious, especially when combined with boric acid. What is needed by the profession to-day is a better knowledge of the drugs it is using.

GENERAL SESSION.

SECOND DAY—JUNE 7TH.

The Chairman of the Committee of Arrangements made the announcement that on Thursday a memorial floral service would be held at Camp Chase cemetery, where 2500 Confederate soldiers, who died as prisoners of war here, are buried. He said that the object of the service is to show the rising generation that we are a united people. The announcement was received with enthusiastic applause.

A resolution from the Legislative Committee, suggesting the appointment of three members of the Association, one from Philadelphia, one from Baltimore, and one from Washington, to oversee all matters of medical legislation that shall come before the National Legislature, was referred to the Executive Committee.

A resolution from the County Medical Society of Philadelphia, recommending the creation of a National Bureau of Health, with a cabinet minister at its head, presented last year, was reported favorably from the committee to which it had been referred, and was adopted by the Association as the expression of its opinion. A committee was appointed to take what action it deemed necessary in furtherance of this object.

The committee to which the subject of the modernization of military sanitary science in the United States Army, as suggested by a committee from Philadelphia, had been referred, reported in favor of the appointment of a committee, not to present the matter to the President of the United States, as originally suggested by the Philadelphia committee, but to memorialize Congress, and take such other steps as would be deemed necessary. This committee will consist of one member from each State and Territory.

On recommendation of the Georgia State Medical Society a resolution to the effect that the rank of Surgeon-General of the United States should be raised to that of Major-General was adopted amid great applause.

A resolution reccommending the appointment of women nurses for the army was adopted on favorable report by the committee to which it had been referred.

DR. FLOYD B. MCRAE of Atlanta, Georgia, then delivered the address on surgery. He stated that he had decided to follow the example of some of his predecessors and not attempt a general review of the progress of surgery for the year, but to discuss only some points in the surgery of the alimentary canal. He called attention to the use of normal salt solution, saying the surgeon who would fail to give his patient the benefit of this valuable agent after a prolonged or bloody operation would be as much to blame as one who would knowingly place his patient in bed with bleeding vessels.

He called attention to the value of rubber gloves in diminishing the danger of wound-infection by the hands of the surgeon and his assistants, and gave Halsted and McBurney credit for their scientific and practical work in this field of research. He called attention to the fact that bacteriologic investigation has repeatedly shown the impossibility of absolutely sterilizing the hands. The micro-organisms of the deeper layers of the skin gradually find their way to the surface during operations requiring prolonged manipulation, and while this source of infection by surgeons who take care of their hands and clean them thoroughly must be small, it deserves consideration.

Mention was made of the four cases of complete gastrectomy now on record, namely, by Schlatter of Zurich, Bingham of San Francisco, Richardson of Boston, and McDonald of San Francisco. Attention was called to the post-mortem findings in Schlatter's case, which showed that there had been no dilatation of the upper part of the intestinal tract to take the place of the stomach which had been removed, and that death had been due to general infection and not to inanition from removal of the stomach. Further attention was called to the fact that the cases must be very few indeed that would justify the operation of complete gastrectomy. He designated the Roux gastro-enterostomy as an original procedure that has received the highest professional commendation, and gave a detailed description of the operation with illustrations. He acknowledged indebtedness to Dr. Coley in "Progressive Medicine," Vol. II., for the description and illustrations of the operation.

Attention was called to the new impetus given to the discussion on penetrating wounds of the abdomen by reports of the cases of gunshot wounds of the abdomen received during the late war with Spain in which the patients had recovered without surgical interference. He does not believe that these cases should be taken as a guide in civil practice on account of the great difference in the character of the wounds and the conditions under which the injuries were received. He claimed that in civil life practically the only hope is in prompt and thorough surgery, and that no time should be wasted in waiting for definite signs of hemorrhage or peritonitis, or in the application of the hydrogen-gas test, which has only an affirmative value.

Carefully prepared statistics were presented of 107 cases of typhoid perforation, in which the patients had been subjected to operation, with a total mortality of 79.4 per cent. The table showed a greater tendency to recovery when the perforation occurred late in the disease. It is reasonable to expect twenty-five to thirty per cent. of recoveries in operative cases, when operation is undertaken within twelve hours after the occurrence of the perforation.

In discussing the treatment of appendicitis he said it seemed manifestly wrong and unscientific to lay down dogmatic and inflexible rules for the treatment of a condition so protean in type. The time at which the diagnosis is made is very variable and the advice to operate as soon as the diagnosis is made is exceedingly indefinite. The diagnosis of appendicitis is not always promptly made. Every surgeon who sees much of this disease knows as a matter of fact that many cases have gone beyond the time for early intervention when first seen by him. The question of intervention or non-intervention, in all cases, can only be settled by the compilation of fair and impartial statistics from both medical and surgical sources, statistics that are definite in all essential details.

STATE MEDICINE.

On motion, the report of the Board of Trustees was omitted for the day, and made the first order of business for Thursday morning.

(To be Continued.)